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ZECHARIAH LINDO.

M.D. M.P.C.L.C. &c.

J. Lunde

DOUBTS
OF
HYDROPHOBIA,
AS A
SPECIFIC DISEASE,
TO BE COMMUNICATED BY THE BITE OF A
DOG;
WITH
EXPERIMENTS
ON THE SUPPOSED VIRUS GENERATED IN THAT ANIMAL,
DURING THE
COMPLAINT TERMED MADNESS.

DEDICATED (BY PERMISSION)
TO THE
RIGHT HON. THE EARL OF EGREMONT,
LORD LIEUTENANT OF SUSSEX, &c. &c.

BY
ROBERT WHITE,
SURGEON, BRIGHTON.

"Felix qui potuit rerum cognoscere causas."

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TO THE RIGHT HON. THE
EARL OF EGREMONT,

LORD LIEUTENANT OF SUSSEX, &c. &c.

MY LORD,

THAT your Lordship's name should be found conferring support on any work, the tendency of which might seem conducive to the public benefit, will surprise those the least who have the honour of knowing your Lordship the most.

There are subjects, my Lord, on which a difference of opinion in the eyes of the Public will seem justifiable; subjects on which a doubt may securely rest, and the many will respect that doubt; and again, others, where to doubt would seem so

utterly inconsonant with what has been commonly considered as correct, that the judgment having no longer fair play, prejudice rests her heavy iron hand on the staff that justice alone should wield.

The little rill of truth, my Lord, however clear, will fail to show to the light, its eddying circles, in the vast stream of prejudice, to which circumstances may have condemned it to be poured, ere it be swallowed up by the overwhelming current that receives it; unless some friendly hand, barring the course of that powerful flood for a while, permit the increase from the rill to correct its waters, and alter their nature and quality.

That friendly hand has your Lordship stretched forth, and from the "Tower of Strength," which that hand has raised

me, can I claim an Englishman's right—
a fair hearing. A right, I proudly feel,
that an English monarch, in the true
audi alteram partem spirit of justice has,
by his example, prepared for me. *

* It was first intended to publish this Work by
Subscription, as a mode of rendering its passage sure
to the hands of those who, unprejudiced by educa-
tion or professional dogmas, might conclude on its
merits by the standard of common sense. A short
announcement of such intention produced as Sub-
scribers

HIS MOST GRACIOUS MAJESTY GEORGE IV.

HIS ROYAL HIGHNESS THE DUKE OF YORK.

HIS GRACE THE DUKE OF RICHMOND.

HIS GRACE THE DUKE OF NORFOLK.

HIS GRACE THE DUKE OF BEDFORD.

THE RIGHT HON. THE EARL OF EGREMONT.

THE RIGHT HON. THE EARL SPENCER.

THE RIGHT HON. THE EARL OF ALBEMARLE.

LORD F. L. GOWER, M. P.

SIR CHARLES M. BURRELL, BART. M. P.

SIR EDWARD KERRISON, K. C. B.

Whatever therefore, my Lord, may be the fate of my opinions, I have nothing yet to complain of on the score of injustice; nor will I believe, that, in the eye of the public, those opinions will fare the worse for not being of every-day coinage.

A cheat on the understanding of the public, my Lord, none better than the public can be able to detect;—I ask, then, the public voice to pronounce judgment upon me, through the national Recorder “Common Sense,” but not to receive their verdict from an interested jury.

T. R. KEMP, Esq. M. P.

WALTER BURRELL, Esq. M. P.

COLONEL WYNDHAM.

HENRY BROUGHAM, Esq. M. P.

REV. G. H. SUMNER, M. P.

E. J. CURTEIS, Esq. M. P.

&c. &c. &c.

Let my opinions, if shewn as counterfeits, be rejected; or, if found, by the test of argument, unalloyed, taken at once into circulation, and pass current for their value.

I have the honour,

MY LORD,

to remain

Your Lordship's

Most obliged and grateful Servant,

ROBERT WHITE.

INTRODUCTION.

No disease has perhaps occupied a greater share of public attention, than that which forms the subject of the following pages;—its importance, therefore, is manifest. The honorable critic must be aware under what different auspices a writer appears, as the opposer of long-established prejudices, to one, who takes popular tenets as his guide, and traces his opinions by the laid down chart of public belief. To the latter, no subject can be called really difficult, since the feelings of his readers are ready to participate in and facilitate his labours. Such a writer will glide smoothly down the stream. The current of general belief wafts him on his course, and the haven of public opinion receives him. Not so the man who launches his little solitary bark against both wind and tide, and sails forth into an unknown ocean. No hand, however friendly, can effectually assist him in his labours, for all

are ignorant of the course he steers. No "long pull, and a pull altogether," helps the devious passage of his vessel—his efforts are his own, and his own hand must wield the tiresome oar till a safe landing be effected. His cares end not even here, for the keel of his bark touches a new strand ; and, to complete his success, he must found a colony of his own, and give it peculiar laws and polity. An opponent who can bear these difficulties in his mind's eye, and not take a dishonourable advantage of them ; whose object, like mine, is the pursuit of truth, and his weapons not *ad captandam* arguments, I would rather seek than shun, for the furtherance of that object alone. That I may not, however, be supposed for a moment as inclined to "assume a merit" for my opinions, I would observe, that I believe every man, possessing a moderate share of talent, and directing it to the same subject, would come to the same conclusions. He would believe, as I sincerely do, that the disease mis-called *Hydrophobia*, as proceeding from the bite of a dog, is nothing more than one of the instances of *delirimenta* among

the learned, that occasionally creep forth, and require only to be a little looked into to be exploded.*

To many in Brighton, perhaps, it will appear extraordinary that I, a young practitioner, should step forward to the "breach," when others, "older in practice, abler than myself," have not stirred a foot in advance. To those who may possess such a feeling, I plead a matter of local necessity; a loud, a lengthened call for something to be done by somebody, for the common interests of all. As the opinions of an impartial and attentive journalist, the following paragraph, which appeared in connexion with the subject of this work in the *Brighton Herald* of June 4th last, will go farther to make that local necessity manifest, than whole volumes from myself.

"There is no town in this kingdom,—at least, so the extraordinary precautions taken

* That able barrister, Mr. Scarlett, in a late trial, mentioned a law in existence, that for 150 years had been improperly construed.—Why are there not mazes in physic as well as law?

on the subject would make it appear,—that has been so alarmingly infested with mad dogs as this, during the last half century. In the course of that period, some scores of persons have been bitten by the reported rabid animals—but it is remarkable, that not a solitary instance can be adduced, in which any human creature has been subjected to the consequences which such bites and inoculations are said to produce. From the above, therefore, it may justly be inferred, that the town has often been kept in a ferment of apprehension, when, actually, there has been no existing cause for it,—and numberless families thereby, we have no question, have been prevented from residing with us, to the great pecuniary injury of the settled inhabitants.”

I shall just observe, that I know nothing of the writer of this paragraph ; but his assertions, I have every reason to believe, from ample enquiry, are correct.

It is a trite remark, that “ what is every body’s business is nobody’s business,” and it seems fated to be verified in this instance. It is for other, older, and no doubt abler, members of the profession in this town

to say why they did not obey a public call, and not for me to excuse my having done so.

Whatever may be their opinions respecting the nature of *Hydrophobia*, they must have known, or they ought to have made themselves acquainted, with the little danger that was to be apprehended from it in this town, though they saw the severest cautions adopted against it.

By these remarks, I must not for a moment be thought to call in question the conduct of the magistrates and the high-constable respecting their late dog-killing plans. These officers did their duty, and did that duty in the best manner, as far as effectiveness against supposed mischief will acquit them.*

* That a number of useless curs are kept by persons whose situations in life can afford no excuse for their services, every one is aware. I must not, therefore, for a moment be thought the defender of a nuisance that the interests of all require should be done away. I see though no necessity why, if we be disposed to hang dogs, that we should give them "bad names." Destroy them, in the name of comfort, but destroy them as

Seeming necessity will excuse, in the eyes of every thinking man, the daily street butcheries of dogs, which we have been accustomed to witness here: this will palliate in a measure the shocking outrages in that way we have seen committed on philanthropy. For three years has Brighton now been in a sense depopulated by this fear-spreading cause.* And what have been its effects?

nuisances, and not suffer their existence to produce terror, though their fate may excite pity. The legislature has made ample provisions on this head; let those provisions then be put roundly in practice, and none will be prepared to deny, that, if we have fewer dogs, we may have fewer cases of madness among them.

* On the eve of one of the most successful summer seasons that this place ever witnessed, I can anticipate a smile from the reader at the word "depopulated," but the remark has nevertheless truth for its basis. Many families of children (no inconsiderable part of our population for a time, from the known efficacy of sea-bathing in scrofulous habits) have, from the fears of anxious parents, been removed to other places by no means so well adapted for their benefit, and, perhaps, having no other decided recommendation to notice, than their distance from the scene of supposed dog-madness.

We have killed hundreds of dogs without the possibility of knowing that the fears which instigated their destruction were justly or unjustly raised; in fact, without ascertaining that a single mad animal met a just death, for that general safety, to which hecatombs of the tribe were offered up. We can only argue that we *might* have been successful, because we truly *were* unsparing.

Such undisciplined terror should properly become the subject of reproof, and it has been thus justly remarked on: — “It is particularly injurious to a place, circumstanced as Brighton is, keeping many persons away and deterring others; some from the fear of themselves or their children being infected, or the dislike of having their dogs destroyed.” And again, “by killing the dogs immediately, all possibility of understanding the real danger is avoided, and it would be much better to hire a stable with a good door and lock, and fasten up the suspected dogs out of reach of one another with chains, and endeavour so to understand whether there is danger or not; instead of proclaiming to all the world that they are

liable to be destroyed by wild beasts if they enter Brighton."

With these remarks, I shall readily leave not only my opinions, but the cause that gave those opinions a public character, to be properly appreciated by the generous and discerning, for to them, who, with an unworthy

"Fænum habet in cornu,"

can throw down the work unperused, I shall not address myself.—To the opinions of the first I can bend, without derogation to the best feelings of manhood; and the latter I feel I may defy, without assuming the airs of a literary *Bobadil*.

The Public's most obedient servant,

THE AUTHOR.

BRIGHTON,
Sept. 1825.

P. S. I have been induced to dilate on local matters for local readers only; by whom they will be, I have no doubt, understood and properly appreciated.

DOUBTS
OF
HYDROPHOBIA,
&c. &c.

AMONG the few subjects in medical literature that science in her flight has touched upon, not formed as a resting-place, HYDROPHOBIA claims a prominent situation.

It has often indeed been made the subject of discussion, but, enquiries regarding it will be found to be answered by a relation of cases, rather than a series of reasonings on causes and effects.

As a sceptic to acknowledged, or, to say the least of them, admitted tenets, I am aware that I shall subject myself to the lash of criticism ; but, if the search of truth can in any way be forwarded by its application,

I offer myself readily as the object. When one of any sect, however insignificant he may be, withdraws himself from the creed that he once imbibed with the rest of its members, a fair exposition of the motives that induced the falling off is due, not only on the score of apology for himself, but in justice to others.

At an early period of my entrance to the medical profession, I had an opportunity of seeing wounds, and other complaints, under circumstances of peculiar mental excitation; in more than one case of which, symptoms, strongly resembling those reported to occur from Hydrophobia, have been present, when it might be almost known, as a certainty, that the parties had not been for some years in the way to be bitten by a dog. At the time I mention, I had an opportunity of attending the medical practice of a dépôt for French prisoners of war at one of our sea-ports. In such a situation, frequent cases of wounds of the punctured kind met my eye, the effects commonly of the bayonet

in the land troops, or of splinters among those in the naval service. Such wounds, generally speaking, cannot be fairly classed with similar injuries received under everyday feelings and events; inasmuch as the subjects of them owed, perhaps, to circumstances, a considerable portion of their severity or peculiarity. Many of these injuries occurred under the influence of the most controlling and powerful feelings that agitate the minds of men — in the field of battle, or a corresponding scene of slaughter on the ocean. They had, perhaps, their severity heightened by the subjects of them lying for hours in a helpless state, in the open air, exposed to the fear of instant death in almost every dreadful shape, until the dubious conflict in which they were such interested spectators, closed by the defeat of their friends. They then became prisoners; in the hands of Englishmen, it is true, but, their mental sufferings cannot be quoted less on that account. They, no doubt, enjoyed all the attentions in the camp of an

enemy, that his own wounded had bestowed on *them*;—but, under what different feelings? Surrounded by the subjects of a strange nation—captives in their own land, but at a distance from their dearest connexions—torn from that land for “the land of the stranger”—crowded on board ships to convey them thither—and, lastly, consigned to a foreign prison.

From his natural disposition to gaiety, and *non-chalance*, a Frenchman may be regarded as peculiarly fitted to bear the frowns of fortune. With a happy pliability of temper he bends to passing events, however severe, and outlives a storm of human misery, that would tear a sturdier mind up to its roots. And yet, such a being is not an unfit subject for nostalgia. Though vivacity form a large portion of his temper, curiosity by no means strongly predominates. A Frenchman will not so readily leave the land of his birth, to seek for pleasure in foreign shores, and foreign habits, as an Englishman. There is not that roving

disposition, the offspring of curiosity, about him. Though thousands of pounds are annually spent in France, from the gad-about disposition of our countrymen, an English tradesman seldom hears, in return, even a solitary *Louis d'or* ring on his counter.

With this disposition, which seems to be suited better to ward off sorrows by the light armour of animal spirits, than to oppose their brunt with the shield of cool unshrinking philosophy, have I seen the wounded Frenchman a prisoner in England.—

With such a subject, under such circumstances, peculiarities of the most decided character will sometimes be seen in the termination of the commonest complaints. In the mind, I have no doubt, they had their origin; the grand model by which half the rough and smooths of our life are shaped—circumstance—gave them birth. Many of these peculiarities, which were developed in strong hypochondriacal diseases, or, more properly speaking perhaps, nostalgic, I

remember, as bearing a likeness to those which are said to occur in cases of what is called Hydrophobia. The discrepancies, also, that happen in the relation of the best cases of that disease, have not a little tended to confirm my opinion of its entire fallacy—as induced by specific *virus* from the bite of a dog—leading me to look to other causes for the effects described. The little analogy these effects bear, to those of any other known specific *virus*—the denominative symptom of the complaint, the dread of water being not uncommonly absent*—having seen that symptom decidedly present from other causes—the want of any direct

* The dread of water, strange as it may appear, is not, by the staunchest advocates of this disease, thought necessary to shew itself. That it is misnamed, therefore, when called *Hydrophobia*, is beyond a doubt. And yet, from the supposed invariable presence of the dread of water symptom, did at first receive a name expressive of peculiarity of complaint;—"Gods! how the son degenerates from the sire." We should be equally consistent, if we applied a term descriptive of peculiarity of disease, to another, with attributes entirely differ-

proof by experiment, that a poison, produced either by the corruption of the fluids or secretions of dogs termed *rabid** really

ent. In fact, we may with the like propriety, call the gout small pox; or, small-pox the gout;—the word *pock*, as descriptive of an eruptive process in the complaint, should not prevent us when Hydrophobia thus establishes a precedent.

* I have had an opportunity of making experiments on rabbits, cats, and other animals, with the blood and salivary secretions of two dogs presumed to be mad, but in no instance was I able to communicate disease. Mr. John Hunter is said to have made similar experiments, (even with fish,) with similar results. I have also inserted a portion of the supposed poison on the point of a lancet in my own arm, an experiment I would at any time repeat, but without any effect, not even the slightest irritation succeeding the wound. If at any time it should be thought necessary to investigate the nature of the Hydrophobic poison, let a committee be appointed by the Royal College of Physicians or Surgeons, and the *mode* of enquiry fixed. Under such circumstances, I pledge myself to produce *one* individual, at least, whose person shall be made the medium of any fair experiments to disprove the communicable properties of the poison.—In Constantinople, where the climate is much warmer than in England, and where dogs run in numbers wild about the city and its confines, not a solitary case of Hydrophobia is said ever to have occurred.

exists—inoculation thereby having failed in many instances, and succeeded in none that I am aware of—have all engendered strong doubts.

There is a want, too, of system, (if I may be allowed such a term) in these effects, in a still greater degree than the little resemblance they bear to each other in different subjects ; I allude to the time of their appearance ; days, weeks, and even years, rolling on, when these symptoms have been seen, after the supposed infusion of a cause into the system shall have been established. At the end of a few days, a few weeks, a few months, many years, and the same effects are reported to take place, from the self-same causes. There has even been, in my mind, something so incongruous in the idea, so totally at variance with the best-established theories on the animal economy, that it has appeared to reach the *acme* of mystification. Doubt has become the result of honest enquiry, and infidelity has assumed a virtue.

The only barrier to such a conclusion is

formed by a series of hypothetical doctrines, that have been broached on the subject by medical men, many of whom stand high in professional attainments, and as high in the estimation of the public. No wonder, therefore, that general credence has been given to opinions so promulgated. No wonder, that the appearance of a dog, supposed to be mad, should be hailed with the same feelings of terror in the minds of the multitude, as the prophecy of an earthquake. This fear has indeed, for many years, assumed such a semblance of nationality, that the pen of the satirist has often quoted it as such. Goldsmith, in his admirable novel of the "Vicar of Wakefield," evidently assumes the risible strain, when speaking of Hydrophobia, in his "Man and the Dog of Islington." It has also, by another writer, whose name I now forget, been used, with the addition of a penny rise in the gallon of bread, and a fleet of flat-bottomed boats from the Gallic side of the channel, to make up the maximum of an Englishman's dreads and his grievances.

If report speak true of the dangers to be attributed to mad dogs, I can, with every sincerity, imagine no greater mischief than they are able to produce. The ferocious tiger, in his rude wilds, may roar, and the passing traveller hear him in security, or, at least, with the knowledge that danger is at hand. The hungry wolf may depopulate a province, but the terrified inhabitants expect death at his approach ; they see in him an open and avowed enemy. But who fears the faithful dog ?—who shuns him ?—none ! — If he possess, therefore, the power of inflicting injury, who shall be safe from its effects ?

Let us resort then to fair argument, on these so-much-talked-of effects of a dreadful and fear-spreading cause ; a greater bane than our present undisciplined terror it cannot by possibility prove — a safeguard it may. Let us apply it, with the best intentions, to develop the hidden powers of a disease, that, from a seeming fatality, has been almost denied its influence. Let us be prepared for the worst, without fearing

more than the worst can bring with it. Let us, at least, be able to say in honesty, as the health protectors of the public, here possess confidence ! or—there cherish fear !

The doctrine of the day, as regards the disease called *Hydrophobia*, inclines us to believe, that a specific *virus* is infused, by the bite of a *rabid* animal, into the human system. For the appearance of this disease there seems a want of knowledge, on the part of the medical world, to give any thing like a definite time, to demonstrate what circumstances may hasten, or what delay, its supposed influence on the constitution ; or, in fact, to paint the complaint, as a whole, a decided and established likeness.

That it is not so with other known specific diseases must be admitted. If we inoculate for small-pox, measles, cow-pox, &c. we expect certain characteristic marks of complaint to make their appearance, and we can date a near time for their coming. When they make their appearance, each preserves its likeness, each possesses its “ form and pressure,” unaltered in character,

though not wholly uninfluenced by circumstances. It is not so with Hydrophobia ;—this disease is said to appear in a few *days*, or it may be as many *weeks* ; or as many *months* may steal on before it shows itself ; nay, even *years* shall pass, and it is said to come at last ! But, *how* comes it ?—*With* certain symptoms, or *without* those symptoms, destitute of “a local habitation”—without even “a name.”

Instead of specific order, we have indescribable incongruity ; not a lively picture of complaint too descriptive to be mistaken, but a pallet crowded with imposing colours, thrown on without order, disposition, or effect. The symptoms that are reported of *Hydrophobia*, if taken in the gross, incline us to believe, that the effects of that imaginary disease are peculiarly directed to the nervous system ; but then, the length of time before they are said to make their appearance, renders it highly improbable, indeed impossible. Instances of death are related, from the bites of serpents—those of the *copra di capella*, the rattle-snake, &c., may be

adduced as instances.* Hasty death ensues after the infusion of this poison ; and yet its effects are generally allowed to be employed

* We gain nothing by analogy with the effects of these poisons to support Hydrophobia, but much to disarm it of specific properties. Men and animals, bitten by these snakes, have been known to die in half-an-hour or less after, and have been seldom seen to live, unless the case terminated favourably, which is rare, beyond twenty hours. This is what may be called true specific action ; no one would contend, for a moment, against this direct application of effect to cause.

How different is the Hydrophobic poison, (so called) *inert*, not appearing, as allowed by its defenders, above once in twenty times—*slow*—as, according to the same, it has appeared twelve years after the bite.

A Mr. Whitlaw has recommended to notice, lately, through the public prints, the *alisma plantago*, as a specific remedy against the effects of both Hydrophobia and Tetanus, because it is said to cure the bite of a rattle-snake. This gentleman says, that a *specific disease* (he calls Hydrophobia so,) must require for its cure a *specific remedy*, and this remedy he is equally convinced will cure Tetanus. What right that gentleman has to such an assumption, I know not. With opinions of Hydrophobia, as a communicable disease, he cannot reason by analogy. The poison of a rattle-snake may be communicated, but Tetanus is not communicable. Whence,

on the nervous system. Either this received opinion then is incorrect, or we must look for another theory to explain the effects of *Hydrophobia*. Let it then be received into the system by the absorbents—why is it so long latent? The general circulating medium would soon be affected—the whole human machine in all its parts would receive its influence! Analogy here again condemns the reasoning, and saves us from a greater blunder, if we follow this theory. Why is it so long latent? Who, in answer to this, in reference to what has been said of

then, inferences which ought only to be drawn by analogy, that the same remedy should be equally successful in three distinct complaints? “I have no doubt,” says Mr. Whitlaw, of it (the *alisma plantago*,) being equally a specific for *Hydrophobia* and *Tetanus* as it has proved to be for the poison of the rattle-snake. If I wanted a convincing proof, (but I think I can shew enough without,) of the wretched shifts that are made to uphold this visionary malady, by men who ought to be “olympus high” above them, I would send Mr. Whitlaw’s letter to be read by the most powerful opponent that the publication of my opinions may draw down upon me.

the hereditary tendency of gout and scrofula; who, after having read, and heard it allowed by the best men of the day, that, in one generation, these diseases may be latent, and, in another, shew themselves, and that, from hereditary influence; who, after this, will deny that latent Hydrophobia may not possess the same properties? Here we produce, like scrofulous and gouty subjects from the birth, *Hydrophobics* in swaddling clothes. Another theory has been given to the world, from hands that might almost ensure its reception, its complete and universal credence. It is this—that, after the bite of a mad dog, the *virus* that he has communicated to the system remains inert, unaltered to its substance and attributes, in the wound where it was placed, after that wound shall have healed, until certain favourable peculiarities of the constitution call it into action. If it remain inert, unaltered in the wound, the fact may be readily demonstrated; and, before the favourable peculiarities occur on the part of the system, the

foreign substance, the *virus*, as possessing substance, may be cut down upon, and as readily extracted as a bullet, a splinter, or any other extraneous matter. This theory seems beggared by a want of enquiry into the causes that bring the, before inert, *virus* into action, and give a mischievous tendency to what may have remained for years a mere "inert and unaltered" lump, and, as little participating in, or affecting the constitutional functions, as a pea in an issue—not so much so indeed, as producing no irritation. 'Till these peculiar adaptations of the constitution to the powers of the added substance, or those, on the part of that substance, to the animal functions be explained, or at least hinted at, the theory will seem to require completion. There are, indeed, no fortuitous circumstances to help this opinion. The several cases of *spontaneous Hydrophobia* on record, would assist an hypothesis, that the disease, like gout and scrofula, might be hereditary; but the latter theory possesses, I think, no other claim to

our regard, in its incomplete state, than that it may be readily proved to be incorrect, and therefore laid at once on the shelf, and distract our minds no more.

Mr. Blaine, in his "Canine Pathology," at the same time that he gives us a very excellent practical description of dogs that are mad, knits together a stranger theory than any yet adduced on the effects of the supposed rabid poison on the human subject.

I shall give both his able remarks, as a scientific practitioner, and his theoretical dreams, in a general manner.

After remarking on the symptoms that demonstrate this disease in dogs, Mr. B. makes an assertion, that will be by no means relished by the advocates of Hydrophobia; an assertion that would indeed startle myself in a measure, were I not aware, by the evidence of my own senses, of its correctness.

That gentleman declares, in the first place, that the disease being called *madness* is misnamed, since, in a vast majority of

instances, the animals affected retain all their instinctive faculties to the very last.

I am not competent, strictly, to decide on the merits of this declaration ; but the next, and startling assertion, as I have called it, I can verify by actual observation. Mr. B. declares, that dogs, in the state called mad, *never refuse nor dread water* ; in fact, so far from refusing or dreading that fluid, that they seek it with avidity, and will plunge their heads in, and lave their mouths with it, when they cannot swallow it. This will appear strange to the through-thick-and-thin believers in Hydrophobia, but only strange as they may never have given themselves the trouble to enquire into the real nature of those symptoms in dogs, that give a kind of momentary truth, to the presence of a dread of water. The plain fact, as Mr. Blaine has very clearly demonstrated, is, that in some cases of this disease, the dogs afflicted *cannot* swallow water. This may be from severe inflammation of the wind-pipe, gullet, or stomach, which is seen going

on ; or, from a paralytic affection of the jaw, by no means uncommon ; or, again, as I have observed, from mechanical obstruction, by a swelling of the parotid and submaxillary glands. In some cases, again, the jaw of the dog is completely fixed, and the saliva runs from the mouth in consequence. When this is the case, an idea of increased flow of the juice of the salivary glands is often incorrectly believed. There may be no increase in the usual quantity of saliva, but by that fluid escaping from the corners of the mouth, we are led at first sight, in this particular, to a wrong conclusion. Let those who would defend Hydrophobia, as a communicable disease to man, first prove the incorrectness of the allegations Mr. Blaine has made, and I have ventured to second.

I do think that they are bound to do this, before they speak of the disease *at all*, for, surely, it will not be for a moment advanced, that *a dread of water* shall exist to form the very denominative symptom of complaint that a man receives from a brute, when, on

authority like Mr. Blaine's, it is distinctly denied, that such a symptom is present when the brutes are themselves affected? It will be thought, by speaking thus *out and out*, to use the modern phraseology, on the disease in dogs, that Mr. Blaine may have proved a perfect *felo de se* of any arguments he can use, to declare its communicability to man. But not so; Mr. Blaine speaks only of its communicable properties. He does not tell us, that the symptom Hydrophobia is present in man as descriptive of them. But, he says, that *rabies* is communicable, and thus attempts to prove how and why it may be so.

Mr. Blaine starts fairly, by declaring that the poison (so called) received from the brute, must be *immediately* absorbed into the human constitution. To this, I most devoutly return aye! and I do so, because I find it impossible to imagine that this poison should, as it is reported to be by one of its idolaters, "so very slowly absorbed, that its effects may not be visible for several months

after.”—Its date of appearance has nothing to do with the act of absorption, that I can see. It is not necessary that a man should wear grey hairs before he become acquainted with the generally-admitted functions of the absorbents ; and reasoning (a faculty that may be stumbled on at eight or nine and twenty, as likely as at sixty years,) on the powers of those vessels, as taught me by men standing high in their profession, I am permitted to declare, that this, nor any other poison, can be “so slowly absorbed.”—

Mr. Blaine, then, when he says the poison is immediately absorbed into the system, reasons, I think, properly ; and, as a practitioner should when he does not take upon himself to impugn what every-day practice convinces him is correct.

And yet, after this, the same gentleman conceives that the local treatment of wounds from a rabid animal may be as safely trusted in for weeks after they may have been inflicted, (at any time before what he calls “secondary inflammation” comes on) as at

the moment of injury. What his ideas are upon this subject, and his thoughts of "secondary inflammation," I shall proceed to explain. Mr. Blaine thus, in his own mind, clears up the seeming paradox.

The poison at first absorbed from the bite, he says, possesses no specific properties *sui generis* to communicate disease; but, after tracing for an indefinite period the various parts of the constitution, comes back—yes, sceptic! returns to the part bitten, and there—with what?—oh, no matter—there produces re-irritation, from which proceeds a specific virus capable of producing *rabies*, Hydrophobia, or whatever else the disease may be called. But, says the same reasoner, if the old wound be destroyed, aye! "here's the rub" it seems, if it be cut out, and a new one made with the knife before the virus pays that part a second visit, no specific disease can be generated—*ergo*, the patient is secure from *rabies*. Why this is so, ask Mr. Blaine.

The only remark that this (I hardly know

what to call it) theory can elicit from a medical reader, I shall anticipate in a few words. It was said of Lord Byron's hero in his Poem of the Corsair, that he "possessed every virtue under heaven but common honesty" — a similar remark may apply to Mr. Blaine's theory. It has every other claim to our notice save that it is impossible to be correct. I, however, respect this virus; nay, more, I venerate one good quality it possesses hugely. There is such a pathetic—

"And art thou gone! and art thou gone!"

about it, when it comes back to the place of its insertion, and seeks for its old friend the bite. Unlike "wordlings," it will have no communication with the new wound which may have usurped the place of its ancient companion, but retires in disgust, nobody but Mr. Blaine knows where, unless it obtain a seat at the Biliary Board, or take the "Chiltern Hundreds" in the sanguiferous system.

“ And there unknown despairing hid,
I'll lay me down and die,
’Twas so for me my *old friend* did,
And so for *it* will I.”

If I should be thought here to have used a dead poet rather too rudely, it must be remembered that I have done it for the purpose of keeping a living advocate of communicated *rabies* on his legs.

Mr. Blaine, notwithstanding his peculiarities as a theorist, is a truly practical man ; and his remarks, from real observation on disease, are as valuable and judicious as his reasoning on *Hydrophobia* is the reverse of either.

These, or similar shifts and contrivances, shall we see the ablest men reduced to, who uphold Hydrophobia as a communicable disease. When they do not, in its support, destroy the known operations of the functionaries of the human body, the office of those organs invariably contradict the possibility of such a disease existing, or existing at least as we understand it, and relate cases of it.

Butler was certainly wrong, in his ideas of sympathy, on the subject of the "Tallyacottian Nose ;"

"For when the date of *Nock* was out,
Off dropp'd the sympathetic snout,"

either will not apply to the Hydrophobic poison, which is said to lie cooped up in a part of the human body, like a spider in his web, or knocking the animal that committed the mischief on the head, would sadly mutilate such a theory.

All that we really know of *Hydrophobia*, may be thus comprised ; we see persons taken ill, and, suffering under certain symptoms, commonly die : these symptoms, it has been customary to believe, are attributable to a certain *virus*, that may have been a few days before—a few weeks before—a few months before—or twelve or fifteen years before, insinuated into the system by the bite of a mad animal. Indeed, this insinuating system has been carried to such lengths, that when all the symptoms of the complaint have made their

appearance, in their fullest and most satisfactory forms, and the cause could not be attributed to a dog, because a dog or any other animal had never been known to bite the subject of them—they have been said to appear spontaneously * (that is, the constitution bringing them on of its own will and powers,) or from eating *beech-nuts*! † So that a disease produced by a bite from a mad dog, or from eating beech-nuts, is precisely

* Mr. Samuel Cooper, in his "First Lines of the Practice of Surgery," remarks on Hydrophobia: "There are some well-attested cases of its having come on spontaneously, and one of these is given in the first volume of the Medical Essays, where Hydrophobia occurred during an inflammation of the stomach."

Dr. W. Ainslie also, in his "Observations on the Cholera Morbus of India," a truly clever little work, lately published, says, "symptoms resembling those of Hydrophobia, have occasionally supervened; nay, *trismus* itself is said to have made its appearance."

† A case of *Hydrophobia* occurring after eating "beech-nuts," is mentioned in one of the Medical Reviews.

similar to that which appears from neither of these causes, from nothing at all—or being born and bred in the constitution, for we may so translate spontaneous.

As regards the *virus* being received into the system by absorption, there exists an objection, (at least, it appears such to me,) that has, I think, hitherto been unnoticed. The wound inflicted by a dog's tooth, is commonly of the punctured kind. In such a wound, but little lesion of substance is produced, though an extravasation of blood is commonly seen for some distance around it. This happens from the pressure of the animal's jaws. It is, indeed, a bruised as well as punctured wound, and may be regarded, as similar, to one that would be produced by a blunted spike stuck in the cheek of a vice. If such an instrument, thus armed, were turned sharply on any intermediate substance, it would, by the application of a slight tap, or blow, first fix that substance; while, additional force applied, would not only drive the spike farther within it, but

injure the parts around by general pressure. A wound similarly inflicted, even if a specific *virus* were inserted, would not be favourable to the process of absorption. Structure being broken down for some distance around, its ordinary functions would, I think it not unfair to infer, be for a time suspended. Meanwhile, the *virus*, or substance inserted, being of a perishable nature, and, as analogy with animal matter in general shews, readily subject to decomposition, would be exposed to the action of heat and moisture, those powerful promoters of putrefaction. A wound from a lancet, armed with the poison, would be subject to no such objections; and yet it has failed, in every instance, to produce the effects, reported to take place from the puncture of the tooth; why,—the believers in Hydrophobia may explain; I confess I cannot. More objections may be adduced to this, and every theory that I have seen or heard, on the subject of *Hydrophobia*. Such theories are merely assertions, masses of idle speculation,

without a seeming happy object to promote ; and yet, as arising from sources that have produced better things, they have been accepted as truths, without a proper enquiry into their claims to credence, and placed on a cheek-by-jowl intimacy, with our commonest, and best-established facts. While on wounds, it may again be remarked, that they sometimes bear a relative affinity to the circumstances under which they were received ; plainly evincing, that the mind has no inconsiderable share in the result, whether fortunate or otherwise. It will be also recollected, that bruised or punctured wounds, particularly of the extremities, (parts more subject than any others in the body to injury from a dog, as undefended or employed in protection of the person,) are regarded, as a class of injuries, liable under any circumstances to produce unpleasant terminations.

It has not uncommonly happened, that a wound from a needle or a small splinter, in the hands or feet, has produced death under all the accompanying horrors of Tetanus ; and

that such appearances strongly resemble those said to occur in *Hydrophobia*, numberless opinions will bear me out.*

As a wound, then, from the tooth of a dog is liable, in common with other wounds of a like nature, to tetanic symptoms—and such symptoms so strongly resemble those called *Hydrophobic*;—may it not—has it not happened, that when death has occurred a short period after the bite of a dog, what were, truly, symptoms of *tetanus*, have been called the effects of *Hydrophobia*? May not such cases have fallen to the lot of men, who, if able to have done so, were unwilling to give themselves the trouble to mark the discrimi-

* In many circumstances, the *Tetanus* bears a considerable resemblance to *Rabiès*, and has doubtless been mistaken for it. This most violent of all diseases, is most frequently occasioned by slight wounds, especially about the hands and other tendinous parts. It seldom appears till after some time has elapsed, and the wound has healed. It is marked by paroxysms of violent general spasms, beginning in the neck and throat, and accompanied by difficulty of swallowing, &c.—*Rees's Cyclopaedia*.

nating appearances, if there be any, between these two complaints?—I will go further;—May it not have happened, in this mad-dog-matical wonder-loving age, that men have existed who wanted an intention to mark a distinction, when such distinction would interfere with established dogmas, and go far to spoil the trade of mystery?

If this disease, this mystifying Bo! catch-ye! *Hydrophobia* have indeed a claim to our credence, as arising from a specific virus, the claim may be readily shewn. What is this *virus*?—where is it to be found?—and when procured, will experiment confirm its reputed effects? It either was never found, or experiment has never made that finding known to the world. I would act fairly in argument, but I do not feel myself called upon to dispute (and I assume the strain of argument only from courtesy to those who hold different opinions,) on what has never yet been proved to have existence. I would rather the *onus probandi*, in that particular, lay on the shoulders of its advocates. I more than doubt, I have, by my conduct,

most unequivocally denied that I believe such a *virus* to exist ; and I call upon its supporters to prove its existence, before they attempt to explain its nature or attributes.

I would readily waive all disputation on the possibility of disease being transmitted at once from the brute, to mix with the blood of man.* I will willingly yield up all ideas on the amalgamating multi-juice compounding theory of cow-pox, and say, that a dog can infect the human subject with a specific disease, by means of a specific poison ; if the effects of that poison approached, by analogy, to any other that we have an idea of, as connected with specific action on the functions. But, when I see known rules, set at nought by theories, spawned but to support a disease, strange, undefined, and incomprehensible ; I must be pardoned for thinking, that our labour might be as profitably employed chasing a moon-beam, as in framing such out-of-the-way kind of speculations.

* It must be remembered, that this admission is only on the score of argument.

Either we are right, in commonly-received opinions respecting the ordinary functions of the body, or we are wrong—if the latter, let it be made manifest, and the doctrine mended as soon as possible. It amounts to this: shall the opinions of the ablest physiologists on the animal economy be offered up in whole hecatombs, (their correctness untainted, unimpugned,) to the strange idol, *Hydrophobia*? I think they ought not to be, though the greatest men of the present day officiate as high-priests in the sacrifice.

Dr. Hunter evidently sneers at *Hydrophobia*, when he relates a case, where “twenty-one persons were bitten by a mad dog, and only one of them became affected with *Hydrophobia*; he was not the first, nor the last, nor the most lacerated,”—he continues, “little more of this disease is known than was a thousand years back, and if any medicine had been given to these people, we should have said we had found a specific, that succeeded in curing twenty out of the

twenty-one." What can we say at this moment—do we know now any more of this disease than we did then? Does not this wretched incompetency to trace *cause*, to *effect*, still exist, as a disgrace to a body of philosophers? It were useless to deny that it does; it were less than honest to say, that we seem unwilling to sit down contented under this merited stigma; it would be less than truth to assert, that any thing has been yet done to throw the slightest light on this subject. "The most dreadful of all human calamities," nobody understands.* That medicine, as a science, is in its infancy, is generally allowed; and surely, if this ignorance of cause, and effect, be permitted to exist, the medical mind will be thought to be dressed in the tucker, and confined by the chin-stay of babyism.

* Though the Germans and French, according to their own accounts, have cured Hydrophobia, (100 cases are said to have been cured by vinegar!) no record, that I am aware of, exists in English Medical Annals, of one clear case of Hydrophobia having been successfully treated.

Let us for a time drop the knife, which we know so well how to use, and take up the pen, which we have in a measure neglected. Let us renounce the tourniquet, and screw the powers of thought to the "sticking point." Let us do something that bespeaks a desire of improvement, where improvement is so much wanting. Let us *think* of *Hydrophobia*; let us *speak* of it as philosophers, (and not confine ourselves to a bare relation of cases;) lest it hang, as a foul blot, on the escutcheon of medical philosophy, that the most dreadful of "all human calamities" is not only not understood, but unsought into.

How unjustly have we treated the doctrine of *Animal Magnetism*, (though probably a bubble) in reference to the tenets we hold of *Hydrophobia*. In the former, we have before us an apparent active and passive agent,—we have at once a seeming effect, and a seeming cause for such effect. But we have not so in *Hydrophobia*. Effects, from some cause, we clearly see; but, who can show that cause to be the bite of a dog? Who,

by analogy with the action of known specific poisons, or reasoning on the established functions of the human system, can bear out such an opinion? If the effects of this disease happened within a period that we have been accustomed to behold specific action, from known specific causes, exhibit its clear and undoubted properties, the disease *Hydrophobia* (as of specific origin) might become a fair question for argument; and be weighed against those appearances, that are known sometimes to take place from wounds, and which are imputed tetanic. But, we are shut out from this mode of reasoning, by the generality of cases of presumed *Hydrophobia* occurring at a remote period from the bite of a dog. I know, therefore, of no reasoning, however sophistical, that can establish the slightest connexion between the presumed cause, and its reported effects. We see, only, persons die with certain ill-described, and indefinite symptoms, at any period after having been bitten by a dog, (whether rabid or not we

may have no proof) and, we have also seen persons die under similar symptoms, whom we could never prove to have been bitten, or injured in any way, by such an animal.*

It would be surely improper, and unjust, to imagine that such persons may have been bitten, when we could gain no intelligence of it.

If I were willing, for the sake of fair argument, to admit, that we are able to prove, that a person, being bitten by a rabid animal, is liable to be infected with a specific disease ; that that disease possesses definite symptoms, and that death commonly follows these symptoms—that we have been always able

* I know it may be said that symptoms of secondary irritation have been noticed in the old wound before an attack of Hydrophobia ; but I regard such appearances as perfectly accidental. For, if it were part of the necessary incidents of specific disease, it must *ever* be seen in an Hydrophobic case ; and, it is reported to have been observed, in only one or two, and even then, in the most unsatisfactory manner, in those I have seen.

to prove this, as the believers in *Hydrophobia* will have it—ought we to have rested here? Should our patients dying have satisfied us? Should we not have enquired what they died of—I mean the proximate cause or causes of their deaths—for they could not die from a dread of water in itself, or the bite alone? In almost every case of reported *Hydrophobia*, where the body has been examined, we can see, in some cases ample, in others probable causes, for all the reputed symptoms of that complaint, without any assistance from the bite of a dog. We shall see inflammation of the stomach, gullet, and windpipe * in some; violent action of the brain in others; and again, instances where such affection, of these several organs, have been in a measure united. The question, therefore, for our consideration, is, what produced this? Can the bite of a dog, in any

* As exemplified in the *post mortem* appearances in Grevett's case, that related by Dr. Pinkard, and Dr. Bardsley's account of the Manchester weaver, related in this work.

way, cause inflammation, individually or collectively, of the stomach, gullet, wind-pipe, or brain? Let the believers in *Hydrophobia* say *where* the torch is *first* applied, and means may then be found, to account for the general conflagration.

That instances of death may have taken place, at any period after the bite of a dog, wholly independent of tetanus from the wound, and, even when it might be fairly inferred, that no such catastrophe would have happened, had the infliction of the wound been by other causes, I will imagine for the sake of fairness; but, it is equally fair to argue, that the mind may have had a principal part to play in the fatal scene. Persons have been frightened to death.* And, as I know no greater object of terror to the many, than the bite of a dog supposed to be mad, I may conclude, that it

* The oft-mentioned and apparently well-authenticated case of the London drayman may here suffice as an instance.

would be as likely a cause as any that could be named, to produce tragic results. The man who would act like a Wellington in the field of mortal strife, might shrink, a very coward, from death, under the circumstances that the bite of a mad dog is said to usher it in with. Such a man would, perhaps, rather face a lion or a tyger, though death might be regarded as morally certain, than meet a rabid animal. And why?—Because, the mental anticipation of the dreadful consequences that *might* arise, would be even more appalling than the form of present and substantial danger. Courage, or good fortune, might assist him in escaping from the jaws of a wild beast, with only a moderate clapperclawing; and he will look on his wounds with satisfaction; he feels they are but slight, and that they will soon be well, and congratulates himself on the prospect of a speedy cure. But, tell him that by those wounds he may have received a poison into his blood; tell him that they may heal, and he shall appear to be well, but, that a

disease still lurks within him, which may, even years after, destroy him in spite of all art can do to prevent it. Tell him this;—and how will the features of the case be altered? Let him be attacked some time after with a complaint possessing rather strange symptoms. “Have you ever been bitten by an animal supposed to be mad?” Ask him that! Offer him a glass of water, the dreadful type of the nature of your fears, and one, that, from report, he well understands. He will shrink from the trial. But I will allow him to possess more than common nerve; he shall take it, with a bold hand, as the passport to life or death. If deglutition be interrupted by casual circumstances;—if slight effort be required to swallow—what is the consequence? Only a *doubt*, perhaps, in the mind of the medical attendant, but a dreadful *conviction* in that of the sufferer. Use all your rhetoric, after this, to persuade him that he is in no danger from the bite, and you will not succeed. It may be, again, that the mind of a man who has

been bitten by a dog supposed to be mad, shall have been for ever dwelling, more or less, on the alarming occurrence. He shall be taken ill—the medical man attends, and the patient tells him his fears. Are such fears to guide an honest practitioner to his opinion? That they have done so, in cases of supposed *Hydrophobia*, may be seen by those related.* The plain, the downright truth is this—the medical attendant knows nothing of the disease, or knows it only as connected with the bite of a dog.† The patient and himself, therefore, will soon *make out a case*—the one dies, and the other publishes an account of his end. Thus, another Mr. So-and-So's case of *Hydrophobia* is added to the list, with no other information to be elicited from it, than that his patient had been bitten, or was supposed to have been

* This is shewn in Dr. Bardsley's case, where the word of a madman seems to have been implicitly relied on by the medical attendants.

† Mr. Battcock's opinion of complaint, was evidently formed by this symptom in Grevet's case.

bitten, (nobody knows how long before) by a dog supposed mad, or a strange one, (which is the same thing, it would seem) and that that patient died, either with a disability, a disinclination, or a dread of swallowing water.

It has been thought that the symptom *Hydrophobia*, strictly speaking the dread of water, may arise from that fluid appearing like a flame of fire to the patient, and hence his dread of it. If this opinion were proved to be correct, no one would wonder that a person refuses to drink water under such circumstances. For, swallowing fire, to a man of common appetite, and whose stomach may not have been prepared for the reception of such a warm morsel, by previous apprenticeship to a juggler, is no joke indeed. But, allowing this opinion in spirit, rather than meaning, we look to the brain as the cause; and, that false impressions are, during the stage of excitement, from various causes, conveyed to the sensorium, none will deny. *D'Israeli*, in the 2d Vol. of his

“*Curiosities of Literature*,” page 473, relates the following case:—“A man in a burning fever, leaning over his bedside pointed to the chamber-door, begging he might swim *in that lake*, and then he should be cool. The physician humoured the conceit; the patient walked carefully about the room, seemed to feel the water ascend, till he declared himself perfectly cool, and was so found.” If it be true then, that real disease can be subdued by efforts of the imagination, it is still more notorious and undeniable, that predicated or anticipated symptoms, or results, may be brought on also by the imagination alone, of persons even of sane mind.*

It has fallen to my lot, to be able to relate several cases, of the severe excitement passing events produce, directly on the brain and nervous system. I recollect the case of

* Instances are related of persons correctly foretelling the day, and even hour of their death; what but the mind could, in such cases, have produced the predicated result?

a friend and schoolmate, whom I knew a fine, healthy, high-spirited young man. He had made one of a party, who hired a vessel for the purpose of shooting puffins, cross-bills, &c.—birds that frequent, in large quantities, the cliffs on the sea-coast. During the voyage, some cause, (a wager, I think, with one of his associates) tempted him to go aloft on the rigging of the vessel. By some mismanagement while there, he loosed his hold, and would have fallen, but for a rope which coiled about his thigh, and held him suspended from the cross-trees, with his head downward, until some of the men went up and liberated him. He was found completely unhurt, and he descended the shrouds with safety, and gained the deck. Venturing thence, to look on the spot, to which, under such dreadful circumstances, he had been so fortuitously attached, his mind was unable to bear the impressions the view excited; and he fell senseless on the deck, while his friends were congratulating him on his hurtless escape. He was taken exceedingly ill

upon this with brain fever. The little sleep he got was a torment to him. He was again suspended by the rope on high ; he again felt the small stay, as envious of the support it afforded, slip in the coil by which it held him ; he again saw the deep gulph below, and felt all the dreadful minutiae of the accident, in mental relation, far more correct and severe than, in actual fact, he had from fright been permitted. Though he recovered from his illness, these feelings of terror never completely forsook him ; and when I saw him in London, a year or two afterwards, he was an altered being. No longer the gay, high-couraged man, but a nerveless, lifeless, creature, that crept, rather than walked, towards his grave. I was with him the first time he ever saw the superb, and lofty memento of national calamity, the monument on Fish-street Hill. He was looking on the pillar with apparent pleasure, and I was endeavouring to conquer his fears, that he might accompany me to its summit. I might, perhaps, have done so, had it not happened,

that, as we looked towards the railed platform above, and were observing some persons thereon, one of them suddenly spread up an umbrella or parasol over the iron-work. The effect on my poor friend was like an electric shock—I heard a stifled moan, and in an instant he was senseless by my side. He recovered after successive fits, but was ill for some days. He left town in a week or so after, and I saw him no more, but I heard of his death in about a year. Here was mental excitement beyond a doubt. This young man had had nothing to worry his mind, that ever I heard of, beyond the circumstance I have related. He was in comfortable circumstances, possessing a little independence, and had only himself to provide for. Another case, as much in point as the one I have related, I will likewise mention. I was called, a few months since, to a married woman who is subject to attacks of hysteria, the most violent I ever beheld, and of the longest continuance. She dated them from this occurrence. She was looking on, with others, to

see a mountebank, or public show in the fields. One of the actors was then swinging on the slack rope, and, all at once, the woman heard him shout, and saw him, as she thought, fall headlong to the ground. She immediately dropped down into a swoon, convulsed with fright. Why she suffered more than others who stood by, for she was not, as she told me, at that time "a weak, timid, nervous woman," but, to use her own words, "was full of spirit, and could do a hard day's work with anybody," may be readily explained. The swinger had attached his legs, by slings, to the rope on which he sat, in the presence of the crowd, who were thus, in a measure, prepared for the event that followed; but my patient arrived only in time to see the feat consummated, and, naturally enough, thought that which occurred from design, took place by accident—thus the intenseness of her feelings. She was, she said, much better, for some time after this, till one day, walking along the street, she observed a female servant standing on

the ledge of an up-stairs window, cleaning the glass. As she came nearly opposite the house, the girl flapped her dusting cloth. The poor woman saw the floating drapery, and it was enough ; she fell on the pavement, and fainting succeeded fainting, until she was nearly exhausted.

When I saw her, which was about three years after the first fright, she was only 27 years of age, but looked as if a half century of care and trouble had pressed with its heaviest hand upon her head ; though, I believe, she had had nothing untoward in the common affairs of life to perplex her. Her husband seemed a careful man enough, and earned sufficient to keep himself and partner above want. They had no children.

The first time I saw this woman, I was called to her in consequence of a more than usually severe attack of hysterics. I was about to give her a little hartshorn and water, when she told me, as well as she could speak, not to do so, “ as she could not drink it—it would choke her ;” I persisted, how-

ever, in pressing her to take it; when she dashed the glass that contained it, with much violence, and apparent ill-humour, from my hand. She soon after came to herself, and, after apologizing for her rudeness, related the cause of her complaint as I have told it. She further informed me, that she could not swallow fluids, for some time after an attack of Hysteria. She had at first tried some hartshorn and water, which "went the wrong way," and excited such dreadful convulsions, that she had never lost the memory of them. She felt her throat sore, generally, for some time after such attacks; and, when she has taken a cup of tea, an hour or two after, she has found it "would go the wrong way," and, not until several cautious attempts were made, could she swallow it.

If I had asked this woman, whether she had ever been bitten, by a dog supposed to be mad, and had laid a particular weight on the question, who will say, that, with such a subject, it might not have produced the most dreadful results? *Hydrophobia* she evidently

had, as the effect of Hysteria. Might I not, by ill-timed questions, have wound the case up to a fatal termination? I think it not at all unlikely. Offering a sick person water, unless he ask for it, seems to me truly farcical, if not mischievous. He may dislike it, or may not want it—there is nothing strange in this. Persisting in such civilities, however meant, when one betrays a disposition to avoid them, puts me much in mind of the opinions of a certain surly old gentleman. “People,” said he, “have offended me as much, or more, by *outrageous civility*, as studied neglect. I have dined with a good-natured but ill-bred couple, who have heaped, in very kindness, provisions on my plate, enough to feed a garrison, in spite of all my entreaties that they would forbear; until I could have requited their well-meant, but officious perseverance, by throwing the plate and its contents at their heads.”

I have no doubt, that many a, so-called, *Hydrophobic* patient, has possessed the same feeling towards his medical attendants, that

the old gentleman had for his friends. It must be remembered, too, that we gain nothing by it; for the dread of water (odd enough indeed) is said to be not always present with those who are supposed to die of *Hydrophobia*. So that our judgment of the complaint, by that symptom, amounts to this,—if the patient refuse water, he is thought to be in a fair way of dying of *Hydrophobia*; and, if he swallow it, he is just as likely not to live, from the supposed effects of communicated *rabies*—so enlightened are we in our knowledge of “the most dreadful of all human calamities.”

Strange likings have occurred, without the slightest reference to the bite of a dog; and strange loathings are just as likely to be induced by other causes. Whether, therefore, a man have a dread of drinking water, or of breathing cold air; or, whether he respire the one freely, and swallow the other inordinately, has as little connexion, I believe, with the bite of a dog, as honesty has to a highwayman, or poverty with a purse.

It is a common opinion, and may be dated from the remotest periods, that the bite of a man in a state of rage, as well as of animals, will produce the most serious results. Pliny speaks of it as the worst of wounds; “*Morsus hominum inter asperrimos quoque numeratur.*” The bite, or pecks, of some of the feathered tribe, too, have been said to produce *Hydrophobia*!

The following extracts, from Barrow’s *Cochin-China*, will be found illustrative of these opinions, and will also shew, that *Hydrophobia* is said to exist in countries where canine madness is unknown.

“To this relaxed state of the body,* may certainly be attributed the fatality attending many disorders, which, in Europe, are not

* May not *Trismus Infantum*, of frequent occurrence in Demerara, be here fairly quoted. This complaint, sometimes attacking children a few hours after their birth, would seem to proceed from the division of the umbilical cord; for, when the wounded part has been, at the time of cutting it, touched with spirits of turpentine, the complaint has not appeared.

considered to be dangerous. The prick of a pin, or a needle, will sometimes occasion a lock-jaw.* The Dutch doctors are also of opinion, that certain cases of *Hydrophobia* which have occurred, notwithstanding no instance of canine madness was ever known on the island, may be attributed to climate, and the state of the constitution, as affected by it. The bite of the large Indian rat, commonly called the *Bandicoot*, is supposed to occasion *Hydrophobia* and certain death ; an opinion which I understand is also enter-

* Mr. Thomas Tilt, a medical practitioner of this town, relates a very interesting case of the kind. It occurred a few years back, when Mr. T. was a student at St. George's Hospital. One of the patients, who had been for some time in the hospital, with (I believe) a pulmonary complaint, had so far recovered that he was about to go out. As he was walking through the wards, to shake hands with one or two fellow-sufferers, he accidentally trod on a needle, which entered the ball of the great toe. The pain being severe, the man relinquished his intentions of leaving the hospital—took to his bed, and in a day or two died of tetanic symptoms, the effect of this so trifling cause.

tained on the coast of *Malabar*. The bite of an enraged man is said to be as certain of producing *Hydrophobia* as that of a mad dog, two cases of which had happened not long before our arrival. One of them being stated by Dr. Le Dulx, in the 5th Vol. of the *Transactions of the Batavian Society*, a work little known in Europe, I shall use no apology for inserting a translation of it.

“ On the 17th March, 1789, information was laid before the court of justice, that the writer, *Balthazar Van Vliet*, in a fit of madness, had plunged a knife into his bowels. The court proceeded to the place without delay, attended by the town-surgeon, Lombart, where they found the patient, by direction of the surgeon attending him, bound, and in strong convulsions, particularly of the eyes. The family being interrogated, as to the origin of his complaint, related, that four or five days previous to the act, the patient had a quarrel with a friend, which proceeded to a furious scuffle, when his antagonist, finding himself not a match

for the patient, in the moment of rage bit him in the arm. The wound was bound up in the usual way, without the least idea being entertained of the dreadful consequences which a bite, thus made, in heat of passion, was capable of producing. Three days after this happened, the patient was attacked with fever; but still no particular regard was had to the wound. The surgeon who attended, observed that he was in a state of continued delirium; that he had a great antipathy to every kind of medicine, and, in particular, a strong aversion to water. On the fourth day, the surgeon, on entering the apartment, found him stabbing himself repeatedly with a knife. With some difficulty they seized and bound him down upon a sofa. On the town-surgeon being sent for, he offered him a spoonful of water, which he refused; but, on being told it was *gin*, he endeavoured with great difficulty to swallow it. When a glass of water was presented to him, the most ghastly spasmodic convulsions were observable in his face, and over his

whole body, accompanied with such a degree of terror, that he exclaimed, "*Water, oh! Jesus, have mercy on me!*" His terror increased on wiping his bloody hands with a wet napkin, when, in convulsive agonies, he called out, "*Oh! God, water!*" Perceiving clearly that *Hydrophobia* had supervened from the bite received in anger, we resolved to treat him accordingly; but he died in the afternoon of the same day."*

* Now here, if any belief can be placed in Dr. Le Dulx, or the Batavian records, all opinions of *Hydrophobia*, as originating from specific *virus*, must have an end, for a clearer case than this related never can happen. It is impossible to imagine any thing more fully descriptive of what its most strenuous defenders call *Hydrophobia*. This case, then, crushes all ideas of rabid poisons, or makes the human subject, like the brute, a generator of them. If, however, the existence of a virus be pertinaciously persisted in, how shall we account for the safety of persons, whose fingers and noses have been bitten off by enraged antagonists. We have seen many instances of this sort of *amusement* practised in our own enlightened country, and by our own enlightened countrymen; and with no other injury, that ever I heard of, than the loss of the parts subjected to

A clearer case of *Hydrophobia*, than this related, it is impossible to imagine;—there never was one, more fully descriptive of the *dread of water*, and this happened from the bite of—a man!

Dr. Le Dulx mentions, in the same paper, several instances of *Hydrophobia* succeeding to the bite of enraged animals; as the case of a boy bit by a *duck*, which he had disturbed in its amours; and of a feeder of *cocks*, who, being pecked in the hand by one of these animals, in separating it from its antagonist, died under every symptom of *Hydrophobia* and madness. The bite of the common domestic cat, rendered furious by provocation, is well known to produce *Hydrophobia*."

Thus we see the bite of a *dog*, a *cat*, a *rat*, a

the operation. This appears to form a Gordian knot for the believers of *Hydrophobia*, and there may be found some among them, who, rather than attempt to unravel it, will, like the hero of Macedon, *cut the thing* at once. This much seems clear, that they cannot believe both in Dr. Le Dulx and *Hydrophobia*!

duck, a *cock*, and lastly, a *man*, produces, or is thought to produce, *Hydrophobia*. We did right to press the vegetable kingdom into our service, to bring on this complaint, as in the case of the beech-nuts; for we should soon have run through the whole animal tribe. Having begun with man, according to Pliny, who can tell that eating a piece of old cheese may not be found as *mighty* a cause of this complaint, as the bite of a *man*, a *dog*, a *cat*, a *rat*, a *cock*, or a *duck*?

It cannot be said that I am an idle caterer for public gratification, since, with the assistance of Dr. Le Dulx, I have been able to dress up a popular dish, in so many different ways. Foreign cookery increases in general estimation, and I have, therefore, the greatest hopes from these Dutch dishes. Dead, or alive, the good man, Dr. Le Dulx, shall have my thanks, and I believe him to be equally entitled to those of the community at large.

So much are the dog and cat the friends and companions of man, forming, as they do,

a part of most families, that it will not appear as an exaggerated statement, when I say, that fifteen persons out of twenty, arrived towards the years of maturity, will be found to have been injured, more or less, at some period of their life, by one or both of these animals. How is it then, that the related cases of Hydrophobia, said to have happened in our own country, are so very few?—One hundred would perhaps include the list of bad, good, and indifferent.*

How is this? I would ask. The *Hydro-*

* I do not here include the periodical baits that are thrown by some of the public journals in this way, to catch the attention of the lovers of wonder. Mr. Egerton Smith, the editor of the *Liverpool Mercury*, in one of the numbers of that paper for June last, with a degree of manly perseverance in the cause of truth, (too little imitated by public journalists, who, generally speaking, have been seen to drop the *truth* for the *terrible* in such instances), has exposed two imaginary cases of Hydrophobia. A very respectable paper in this county, too, only three years ago, published an account of a horse bitten by a presumed mad-dog, going *barking* mad. Who, after this, can depend on newspaper records of Hydrophobia?

phobic virus must indeed be very inert, so much so, that analogy with other poisons shuts this out from a share of our apprehension, even allowing it all its reputed attributes. Let us look at small-pox, measles, cow-pox, yellow fever, plague — let us look at all we know, or may have heard of, the mildest and severest, contagious or infectious diseases, and our research will teach us to set Hydrophobia at nought. A poison that is said to be capable of producing the most dreadful of all human calamities, is the most inactive. Is it so with small-pox, or the plague? Shall we not find diseases of the most violent nature, the most certain in the consummation of their effects? I think we shall. What, then, can make *Hydrophobia* an exception from this seeming general rule?

The more we think on the received opinions of *Hydrophobia*, the more shall we find ourselves lost in thought, on their incongruities. This visionary disease is included in the depth of a huge hiatus in scientific

enquiry. The truly honourable practitioner will deplore the existence of this extensive slough on the wound—the large, deep cavity on the bosom of medical science. He will long to see the foul eschars of doubt removed, and the healthy granulations of truth shooting up beneath, to fill the fissure. Let him then, with a firm, but cautious hand, apply the powerful stimulus of argument, and his hopes will be soon accomplished.—Let every *one* mend *one*, and the happiest results must ensue.

There are men, now among us, who have done much for the profession of which they stand high, and honourable members ; much for the age in which they live, and much to benefit posterity. But, will any one of them say, that he has done enough, while this stigma on that profession, and that age, this want of knowledge of “the most dreadful of human calamities,” exists ?

Would not our conduct appear replete with folly, were we to employ a steam-engine, that might coil a cable for the

proudest vessel in our own proud navy, to *spin a chafer*—an operation that every idle urchin can perform with the aid of a minikin pin? We have men in the medical profession, whose minds will bear the strictest analogy in the world of literary research, with the powers of that *nil-ultra* agent in the field of mechanics. Should then these powerful mental engines be directed to common-place purposes alone? to commentation on established facts, and remarks on tenets, that all acknowledge incontrovertible?—Should not, I would ask, their gigantic means be employed on nobler objects?—and a nobler object than the detection of fact, than the deduction that reasoning on palpable effect, and reputed cause, permits us to draw, can take up no man's time.

I am not the man, perhaps, whom the soothsayers of the day would decree as likely to fill up this chasm in medical science; since, I have nothing to throw into it valuable enough to excite its closing.* I bring

* One of the public journals, speaking of the experiment on Hydrophobia, in which I was necessarily in-

only as free-will offerings, an ardent love of my profession, and a respect for truth ; I bring all I can, but I fear that my offerings, unbacked by age or eminence, will be incompetent for the purpose I would design them.

Let them then, who possess the requisites that I feel I require, advance to the gulf. To them, the leap is easy ; the return, sure and safe. Let them support *Hydrophobia* with their best powers, and give it laws and character, (which it now possesses not) or, honestly declaring it a bubble, suffer it to burst into nothingness. Let them not bring cases alone, but arguments to impugn or establish them. Let them shew the disease as it ought to be seen, clear and undoubted ; and, by reasoning on cause and effect, as applicable to the known laws of the animal machine, place it above doubt, or renounce it. Let them do this, and they do every thing the cause of truth requires at their

cluded, designates me, in courtly phrase, “ the medical *Curtius*, who has leaped into the gulph of doubt, to endeavour to fill up the wide hiatus in scientific enquiry, at the hazard of his life.”

hands ; they pay a debt, that the talent of their profession owes at once to the common good, and the ripening mind of the age.

My very worthy friend, and staunch coadjutor, Mr. H. Sutton, surgeon, of this town, (whose professional talents can receive no addition from my pen, to the value that common opinion estimates them at) has informed me of a case of translated gout, where the symptom *Hydrophobia*, exemplified by a dread of fluids generally, was unequivocally present. This symptom, Mr. Sutton thinks, was connected with the sense of burning heat the patient felt about the pit of the stomach, and a high state of inflammation of the throat, rendering deglutition excessively difficult.

The case of *spontaneous Hydrophobia*, which follows, will bear a few comments, which I shall make ;—first, earnestly requesting, as in all others I may submit to analysis, that the case itself should be read most attentively—the furtherance of truth requires

this caution, whichever be the scale, that the mind of the reader may throw the preponderating weight of his opinion in.

Case of Hydrophobia in JOHN GREVET, Aged 30 Years; By MR. BATTCOCK, Surgeon, Brighton.

December 7th 1809, was in perfect health, till towards evening, when he said he was not well, but complained of no particular symptom—slept well at night.—8th of December, ate breakfast and dinner as usual; in the evening, complained that the sight of the tea, when poured out, made him uneasy; said it “stopped his breath”—was restless during the night.—9th of December, came down stairs with the intention of eating breakfast; on seeing the tea poured out, his throat felt painful—he afterwards attempted to put a cupful of tea to his mouth, but could not accomplish it, spasm of the muscles about the throat seemed to threaten him with instant suffocation;—he went up stairs to avoid the sight of the tea-table, and desired his wife to bring some brandy to rub his face and neck with, which now became painful. (The pain was on the left side of the lower jaw, from the chin to the ear, and extended down the neck towards the shoulder.) On his seeing the brandy, the pain in the face and spasm in the throat in-

creased, so that he could not suffer it to be brought near him; at noon complained he could not swallow his spittle, but was for a while somewhat free from pain; towards evening, the symptoms of pain, &c. became more troublesome, attended with extreme itching all over the surface of the body;—at this time, I was sent for—he stated his symptoms to me very distinctly, but could not remain a minute in one posture. *I directly suspected the cause of his illness, and desired a basin of water might be brought;*—the mention of this distressed him, and he applied both hands to his throat. On the water being brought into the room, suffocation threatened him, and he could not contain himself until it was taken away.

I enquired if any account could be given of his having been bitten by a dog.—His friends seemed positive that no such accident had occurred. I succeeded during the interval of spasm to open a vein in the arm, and took away eighteen ounces of blood. This appeared to quiet him for about an hour—a blister was applied to the pit of the stomach, and another behind the left ear. He was very uneasy during the night, walking about the room and scratching himself.—10th of December, he had two evacuations from his bowels during the night, and voided urine several times; his pulse was but little altered from the natural state, except when the paroxysms of coughing were present.—Early this

morning, he attempted to eat a piece of bread, which had been dipped in wine, but it does not appear that he swallowed any part of it. About six o'clock this morning, the spasmodic affection of the diaphragm and œsophagus (gullet) became more severe; he was now scarcely two minutes free from an effort to cough, which effort, he said, always gave him great pain, and made him "afraid of losing his breath;"—a constant desire to spit came on at this time—he probably spat a pound of saliva and mucus about the floor of the room in three or four hours. The itching on the skin was now become intolerable, and a profuse perspiration accompanied it.—At nine o'clock I took away eighteen ounces more of blood, but it did not produce the slightest degree of syncope, (faintness) or mitigate the spasm. On the contrary, he became more unmanageable during the time of bleeding, and accused me of wishing to "stop his breath and kill him;" at noon his countenance materially altered; the teeth and gums of the upper jaw were constantly exposed, and frothy saliva ran out at the sides of his mouth—he begged me to kill him at once; stamped on the floor with violence, became furious, and could scarcely be held by the attendants. He was now confined on the bed with a strait-waistcoat—he wished to be confined when it was proposed—he now attempted to *kick* and *bite* every one who came near him—occasionally requesting to be held fast, lest he should *bite* or injure

others. The vessels of the tunica conjunctiva in the eyes became filled with red blood, which, added to the way in which his teeth were shewn, and the foaming at the mouth, gave his mouth a frightful aspect; in this state he continued till near one o'clock, p. m. and expired.

After his death, I learned that a favourite dog of his had been sullen for two or three days, refusing food, and had left the house—was afterwards found dead on the cliff. This happened about six weeks previous to the attack experienced by J. G.—The dog was in the habit of jumping up into his master's lap, and licking his face. Two things, in this case, are perhaps not unworthy of notice, viz.—1st, that within a few minutes of his death, while apparently insensible, he repeated the name of the dog that had lately lived with him, and said he wished he could "get at him to bite."—2dly, the coughing or convulsed motion in the œsophagus, throughout the whole disease, was so loud and remarkable, *that several people in the neighbourhood, (who knew nothing of the dreadful situation the man was in,) said he was barking like a dog.*—The noise certainly much resembled it.

On opening the body after death, the only appearance of disease having existed, was inflammation of the stomach and (gullet) œsophagus.

(A Copy.) G. BATTCOCK.

Before I proceed to make any comments on this case, I shall speak a few words of Mr. Battcock. Sixteen years have passed away since this case occurred, during which time, Mr. Battcock has been actively, and honourably, engaged in professional pursuits. Sixteen years, therefore, of the best period of a medical man's life, have passed before him—the years of practical experience. That sixteen years, passed under such circumstances, may have altered the notions of any man, as regards cause and effect, no one will doubt. I am inclined to believe, such an alteration, during that time, has been effected in the opinions of Mr. Battcock. I am inclined, I say, to this belief, by the *manner* in which the case itself is related ; and I would state it, as an honourable instance, that sixteen years have not passed over the head of that gentleman, as if they had “never been.” I feel somehow assured, though I have not the pleasure of that gentleman's acquaintance, that he will accept these clearings up on apparent incongruity

of opinion, as they certainly are meant—honestly. I am more than commonly anxious that he should imbibe the true meaning of my words, since, I have received from him a favour, that, at the end of sixteen years, (if I live so long,) I shall not cease to remember, as an instance of professional courtesy.

Hearing of the case of Grevet, I wrote to Mr. B., requesting he would favour me with the particulars, premising that I might see occasion to make public use of them. In a polite reply, he states his perfect readiness to do so, and thus mentions the case: “*The case of Hydrophobia you allude to, was a SPONTANEOUS one, without the biting of a dog;—the case was very clear and distinct.* Mr. Battcock had lost the written account in lending it, and I was favoured by the annexed copy, from the minute-book of Mr. Pitt.—It is correctly given.

After an opinion from the medical gentleman attending this case, that it was “*spontaneous, and without the biting of a dog;*” it would, perhaps, seem unnecessary to

make a remark on it, but, I am unwilling to throw away any chance, when truth is the object of search.

Mr. Battcock says, that when he first saw the man, judging of course from circumstances that were related to him, he “directly suspected the cause of his illness;” that is, he believed the disease to be *Hydrophobia*, and, it seems, as if he could imagine that symptom to be produced only by the bite of a dog; hence the questions respecting the probability of the patient ever having been injured by such an animal. Those questions met a decided negative; the man had never, as far as could be learned, been bitten. Leaving then, for the present, as regards relation, the case in a measure to its merits, I shall speak of the appearances that presented themselves on opening the body after death — “inflammation of the *stomach and œsophagus*.”

From the proximity of the windpipe, an organ so very materially concerned in breathing, to the inflamed stomach and gullet,

(however inflammation in those parts may have been produced,) respiration will be seen improperly effected, by the parts performing that prime office participating in the mischief going on in the stomach and gullet. This will account, I think, for the sense of suffocation the poor man experienced. This sympathetic participation of one part with another that is injured, will be readily understood by professional men, but not perhaps so clearly by the general reader. To the latter, I would address the following remarks. The brain is argued to be the seat of all sense, distributing or receiving every impression that we are capable of feeling, by means of its numerous tentaculæ, the nerves. These ramifying *feelers* are distributed in all directions about every part of the body, and particularly, perhaps, as regards number and magnitude, on those organs that are more immediately performing the grander functions of the animal economy.—Such are the lungs, the heart,

and the stomach. The theory of sensation is yet by means wound up to completion ; and the opinions that have been advanced on this subject, would distract, not convince, the mind of the common enquirer.

Thus much, we may be said to clearly understand, that different and distinct impressions are conveyed by the nerves, though, under what peculiar agency, we may be at a loss to describe ;—animal electricity has been looked to as the mean.

The brain may be *immediately* or *mediately* excited. *Immediately*, when, by passing events it is directly acted upon alone ; and *mediately*, when it receives its exciting impulse from injury, however produced, in any of the other functionaries.

As an example of preternatural excitement, induced by the brain on any other part, when it (the brain) has been made by direct influential causes the agent acted upon, some affections called hysterical may not be unfairly quoted. This sort of complaints, in most instances, may be traced to passing

events acting directly on the mind, "to outward and visible signs," of as many capable causes, to produce certain effects on the nervous system. Joy, grief, fear, anger, all produce a peculiar, distinct, and *immediate* excitement on the brain; and, by *mediate* consequences, affection in other organs. In hysteria, the muscles of the neck and throat are seen to be convulsively excited; not by any direct influence of passing events on *them*, but through the medium of the brain, as the direct receiver of the absolute exciting cause. These muscles are only more violently affected, as their powers are, in a measure, involuntary; and, as they are the untired, and ever-moving performers, of the grandest duty allotted to organs of the human body.

The muscles of the body generally, according to their effective economy in the human machine, will be seen to partake of the effects of over-excitement, made by any cause, on the brain; and thus, inordinate strength is evinced. How often will the extraordinary efforts of a man in rage, surprise himself in

a cooler moment; "Passion gave me strength," he says, "or I could not have done it."—He reasons correctly, his increase of strength is caused by over-excitement.

The brain, as regards over-excitement, is thus, then, seen to become a *passive* agent, before it takes upon itself the powers of an *active* medium, and affects the functions of other organs, by the inordinate excitement circumstances may have transmitted to its own.

A severe blow on the head readily calls the stomach into action, through the medium of the brain; while the head will be seen to sympathize with the stomach, if a blow be received on it, or in its immediate neighbourhood.

To render this sympathetic arrangement between organs more manifest, I will venture a few observations *why* these things occur.

As the nerves descend from the head to the trunk, it follows, that the neck must be more thickly invested by their main portions, than any other part of the body. Proceeding

from the neck, their ramifications become wider and more extensive, but they thickly interlace the windpipe, the gullet, the lungs, and the stomach, in all directions. Directly between the gullet and the windpipe, imbedded in the intermediate substance, are several nervous branches, and the recurrent portion of a very large nerve is here likewise inserted. It follows then, as a matter of course, that affection in either of these organs producing active inflammation, and consequent pressure on the intermediate nerves, that extensive mischief, according to the violence of the affection, will be produced. This mischief occurs in no barren spot, no commonly sensitive portion of the machine, but in direct proximity to the main bodies of almost all the nerves, and immediately on their leaving their source, the brain. That source is seen to be readily susceptible of injuries in important organs, and more susceptible of none, than those in the gullet, stomach, windpipe, and lungs. As, then, the brain will be most

readily affected *mediately* by complaint in these organs—the organs themselves are more than commonly acted upon by excitement that the brain *immediately* receives. Any violent passion of the mind will produce the most dreadful sense of strangulation, the most violent symptoms of suffocation—the brain having been directly excited; but, as soon as that excitement in the latter organ, by a copious discharge of tears, is diminished, the actions of the muscles of breathing and deglutition become more tranquil and natural, though long-drawn sighs, and difficult attempts to swallow, plainly indicate still existing irregularity, and, continuing for some time, forcibly demonstrate that the brain does not very readily recover the effects of over-excitement.

Thus the brain, as the medium of primary excitement, affects organs by means of its nerves; or, in *immediate* injuries to them by those nerves, is *mediately* made a participant.

The unfortunate patient, in Mr. Battcock's

case, knew well the dreadful excitation that the attempt to swallow produced; and, in consequence, he not only rejected fluids, but every thing else. The only thing, when disease was fully developed, that he attempted to eat, is said to have been a piece of bread, soaked in wine, and it appears he could not swallow it. We often may observe the difficulty with which fluids are swallowed (more so, indeed, than solids) in cases of severe quinsey, a complaint I am myself more than commonly subject to. I never yet knew a person with such an affection of the throat who could, without decided inconvenience, breathe the cold air. This may occur, in consequence of a participation of the complaint, by the upper part of the windpipe, with that going on in the fauces.

When, then, inflammation of vitally important parts produces effects, in a minor degree, similar to those that are commonly represented to take place in cases called *Hydrophobic*; when we observe them, under any circumstances, assume a more violent

shape, we may conclude, that a greater cause for them exists; and in almost every one of such cases we shall find, after death, an ample cause for them, and the destruction of life in inflammation of the *stomach, lungs, or brain.*

I am disposed to believe, and I think that a common attention to cases will justify the belief, that *Hydrophobia* (I mean the symptom literally construed—a dread of, or dislike to water) supervening, will demonstrate that inflammation of the gullet, and probably of the stomach, is going on, depending in its severity or constancy on the degree of injury in those organs, or excitement that the brain may have in any way received. In Mr. Battecock's case, this mental excitement may have been produced by the complaint in the stomach and gullet, or, what is quite as likely a mean, by impressions wrought on the mind, by questions improperly asked, and unnecessarily relied on, for information on the nature of the disease. Nothing can more fully demonstrate this

powerfully-excited feeling, in the poor man's mind, than his calling the dog, when in a state of insanity, and wishing he could get "at him to bite," particularly on allusion to any events that a dog could be made to participate in—the man, when in a state of sanity, did not say that he had ever been bitten by such an animal. As to the *barking*, which, I have no doubt, I correctly translate, by calling it a severe hard cough, its constancy being kept up by the effects of the air on the irritated surface of the organs of breathing, I think it needs no comment; farther than to explain that its peculiar sound was given it by the feelings of those who heard it. As regards the opinion of "several people in the neighbourhood," (who knew nothing of the dreadful situation the man was in,) and who *said he was barking like a dog*, it cannot be for a moment depended upon, for all those who lived within sound of the supposed *bark*, could not, I think, have failed to hear of the presumed *bite*. That almost every body knew what was the matter,

almost every body will very readily be disposed to admit, I am sure. I have no doubt, from the appearance of the eyes, that the proximate cause of the man Grevett's death, was brain-fever; no record of the examination of the head is, however, given.

*Case of Hydrophobia, by DR. PINCKARD.**

WILLIAM WATERS of Chipping Barnet, Herts, a sawyer, aged 25 years; a strong, healthy man, married, and father of one child, was bitten on the 14th

* As the best of us sometimes find ourselves disposed to make ill-natured remarks, and, as it is not improbable that, falling into the hands of the *good*, I may be exposed to such; I will just mention, that in selecting this and the following case for comment, I was not actuated by unfairness, and certainly not by personal feeling, for I know neither of the medical gentlemen who reported them. I can do more than acquit myself on the score of unfairness, by relating, that having heard from a medical friend in this town, that another practitioner here had written to Sir Astley Cooper, for his opinion on my non-belief of Hydrophobia; and had been, by the latter gentleman in reply, informed, that he possessed cases which would go far to oppose it; I wrote to Sir Astley Cooper, with the name of my informant, and by that gentleman's wish indeed. In my letter to Sir A. Cooper, after mentioning this circumstance, I continued—"I had intended to

day of September last, close above the upper joint of the little finger of the left hand, by a strange dog, which he met running upon the public road between Barnet and Whetstone. The wound was deep, and the laceration extensive. He applied to Mr. Lloyd, a surgeon at Barnet, and no suspicion of madness

speak of the cases of Dr. Bardsley, of Manchester, and Dr. Pinckard, (the former twelve years after a bite from a dog, the latter only three months,) but if you would do me the honour to mention the particulars of any others, or draw my attention to where I might meet with them, I would, in direct consonance with the feelings of justice I hope I cherish, form my opinions on such cases, rather than the two I mention."

I had, at this time, made my comments on the above cases, but was willing to forego them and prepare for others;—my letter (having escaped, probably, Sir A. Cooper's notice,) received no answer. At the same time, I wrote to Mr. Abernethy, from whom I received a polite reply, wherein that gentleman says;—"I am so heartily sick of publicity, that I am unwilling to do any thing that might bring my name forward in controversy." Finding no difficulty to appreciate Mr. Abernethy's feelings, I am content with his politeness, though I should be most proud to possess his opinions, (valuable on most points) clearly on this subject. Having also been informed by Mr. Sutton, that Mr. Lawrence, of this town, had seen no less than *thirteen* cases of Hydrophobia, I wrote to that gentleman; Mr. L. sent me a reply, stating, that he would readily have obliged me with any of the cases, but that he intended to publish them.—After this, perhaps, the charge of unfairness will not be cast in my teeth.

being entertained, the common treatment, as in other recent wounds, was employed. The case proceeded without any circumstance worthy of particular remark, leaving an eschar about an inch in length. No provocation was given to the dog; *nor has any opportunity occurred of ascertaining whether or not he was affected with rabies.* On Friday, the 26th of November, *seventy-three days from the time of the accident*, the man felt slightly indisposed, and returned home from work, without having eaten his usual dinner; *but it was observed that he drank a draught of porter.* About eight o'clock in the evening, he called upon Mr. Lloyd, complaining of a severe pain in his left shoulder, saying he could not raise his arm to his head. Both the surgeon and himself considered it to be rheumatism; a bolus of pulvis ipecacuanhæ compositus was accordingly prescribed, to be taken at bed-time; and he was directed to rub the part with a spirituous embrocation; but, feeling himself much worse after he went to bed, he sent, about eleven o'clock, for Mr. Lloyd to visit him, when he still complained of pain in the shoulder, adding, that he was distressed likewise with the wind; another of the boluses was administered, which he swallowed with difficulty, and he was advised to take some warm wine and water, but *he put it away, saying, that he could not drink it.* Mr. Lloyd felt less satisfied respecting the nature of the disease than when he saw him in the evening, but no

suspicion yet arose that it might be Hydrophobia. During the night, he remained extremely restless, and groaned so as to disturb the family in the adjoining house; but the pain of the shoulder subsided, leaving, as he expressed it, "a tightness and choaking about the throat," which increased to an alarming degree. Between seven and eight o'clock the following morning, Mr. Lloyd repeated his visit, when he found him in a state of extreme agitation, with a sense of constriction about the throat, and great uneasiness and oppression at the epigastric region. His respiration was irregular and convulsive, and he had frequent eructations of flatus. In order to obtain relief from the difficulty of breathing and sense of suffocation, he had placed himself upon his knees and elbows in bed. Some water being offered him to drink, he suddenly started with terror and alarm, was thrown into violent convulsive distortions, looked offended, and said he could not take it. The nature of the disease being no longer doubtful, Mr. Lloyd had immediate recourse to mercurial friction. About three ounces of the unguentum hydrargyri fortius, mixed with camphire, were rubbed in by three persons, upon the extensive surface of the neck and thorax, the patient himself assisting. This process was continued until he felt greatly exhausted. He then begged to be left quiet, saying that he was better. His pulse was at this time languid and feeble; after he was a little rested, about

two ounces more of the ointment, mixed with opium, were rubbed into the legs and thighs, the friction having continued *until it was interrupted by excessive agitation, and general convulsions*. The violent symptoms of this *most dreadful of all human calamities*, now increased rapidly. Any liquid was an object of perfect horror to him; the moving of it in a basin, pouring it from one vessel into another, splashing it about the room, placing it before his eyes, *or even speaking of it*, produced inconceivable agitation, accompanied with signs of terror, and a dreadful distortion of the whole frame. Some water being presented to him, he was instantly seized with convulsions, sprung up suddenly, and leaped out of bed, throwing himself from the very sight of the basin. At this period of the disease, the convulsions recurred in rapid succession; a considerable quantity of frothy saliva issued from his mouth, he uttered hideous and indescribable groans, looked trembling and terrified, and a marked expression of horror settled upon his countenance. Soon afterwards, it was observed that his urine passed involuntarily; he complained more and more of the "wind and choaking;" the general agitation and restlessness increased; the convulsions grew stronger and stronger, and the groans and screams louder, and more frightfully distressing. Between ten and eleven o'clock, he was quite outrageous, and the convulsions being so powerful, that four people were unable to hold him

in bed, it was deemed expedient to have recourse to a strait-waistcoat. During the violence of the convulsions, one of the persons, who was holding him, said *that he attempted to bite him*; but he immediately apologised, observing, that he did not mean to hurt him; and Mr. Lloyd, who witnessed this circumstance, believed it to be accidental rather than intentional. The cicatrix produced by the wound upon the hand was examined, *and the nature of the malady was openly talked of by the crowd of persons who came into the room*; but, instead of feeling any apprehension upon the subject, he would not admit that the disease was in any way connected with the bite he had received. He persisted in calling it "the wind," but expressed himself conscious that he could "never recover." No change could be perceived in the part which had been bitten, except that the scar appeared slightly livid, as if it were from cold; it was neither swelled nor inflamed, nor was there any tumor, inflammation, or soreness in the glands of the axilla; but, *on being questioned particularly* respecting the state of the limb, *he remarked, that he had felt a sense of cold or numbness in the hand and arm, for two or three days previous to his being unwell; and that he had covered the bitten part again with a thumb-stall, which he had used for some time after the wound had healed.* The restlessness, terror, extreme agitation, and strong convulsions continued until noon; the convulsions

recurring with excessive violence at intervals of only two or three minutes, and from the slightest irritation, mostly from the sight, the sound, or only hearing the name of water. About one o'clock, he became more calm, and it was perceived that the horror and aversion to liquids were in some degree diminished. Soon after, he was prevailed upon to swallow two drachms of the tincture of opium. It was between seven and eight o'clock in the evening of the 27th of November, when I first saw him. Messrs. Lloyd, Rumbold, Booth, and Morrison, medical practitioners at Barnet, were present. He was then lying in a strait-waistcoat, extended upon his back, with his hands and feet fastened to the bedstead. He was tranquil and composed; his countenance was natural, and his intellects undisturbed. To the questions which were asked him, he replied in a collected and rational manner; and, he was sensible of all that passed in the room. His skin was of natural warmth, and covered with a moderate perspiration. The pulse did not exceed ninety in a minute; it was obtuse and undulating. On pressing his wrists with the fingers, the artery was perceived to be slightly tremulous. The tongue was moist, and although whitish, nearly of a natural appearance; the eye looked rather flat and clouded. The convulsions had ceased; the dread of liquids was removed, and he frequently called for water to drink; but, he had still a great source of terror and agita-

tion, from a peculiar sensibility to currents of air falling upon his skin, and to the impression of odours upon the olfactory organs; the senses of feeling and smelling seemed to be preternaturally increased. He had no pain, but was extremely distressed with flatulency. *His respiration very much resembled that of a female in a paroxysm of hysteria.* It was accompanied with frequent irregular sighing, and almost constant eructations of wind. On my asking him to describe his feelings, he said, I am better, much better, I have no complaint but the wind and choaking;" and upon my loosening one of his hands, in order that he might accurately describe the parts most affected by constriction, he pointed to the throat and epigastrium. It was distressing to observe the anxiety and the frequency with which he now called for water; yet I observed that he never took it by deliberate drinking, so as to bring the organs of deglutition into any number of successive actions. Each time it was given to him, he seized the cup eagerly, both with his lips and his hand, made one convulsive swallow, then hastily pushed away the vessel, saying, if the person who held it chanced to press it longer to his lips, that he would give him "too much," and would "choak him." Several loud eructations of air usually followed the swallowing of the water, and he remarked, that he drank it "because it broke the wind, and eased him." For a short time after obtaining this

relief, his breathing was less disturbed, and, he conversed with all the calmness of a person in sound health; but soon the spasmodic feeling about the throat and stomach increased, the respiration was oppressed, and he again called anxiously for drink, to move the wind, as he expressed it. On my giving him some wine in the water, he said it relieved him more than the water alone; but he begged that it might not be made strong, observing, that if it were he could not swallow it.

Next to his anxiety for frequent drinking, the greatest distress that he suffered proceeded from the opening and shutting of the chamber door; which, indeed, was the most characteristic symptom at this stage of the disease. He was more watchful, regarding the door, than concerning any other object. Whenever it was moved, he started in great agitation, looked terrified, and impatiently called out "the door, the door;" and, although he neither saw nor heard it opened, so acutely sensible was he of the least current of air, that he instantly knew, from his own sensations, when any person entered or left the room. The slightest current of the breath falling upon his face from any one who was speaking to him, air blown from the lips upon his breast, and the fanning of a hat across his chest or throat, produced great agitation, together with convulsive breathing, and a sense of suffocation: but, the same effect was not observed from waving a hat across his

feet and legs; nor, from suddenly sprinkling a few drops of cold water upon his face or thorax. A candle was held near to his eyes, but he expressed no uneasiness from the light of it. He had a dread of any person standing near his face; also of any substance being put in motion near his mouth; and of any thing strong or volatile being applied to his nose. He seemed likewise to have a terror respecting the moving, or in any way disturbing his person. He expressed himself satisfied to be fastened in the waistcoat, and when his hand was released, said that it gave him no relief. *He swallowed the water lying on his back, with the head low*, and refused to be raised, when it was proposed to lift him up to drink it; he complained of the wind produced by a handkerchief, which was used to wipe the saliva from his lips; and he was greatly disturbed by the smell of a cloth which happened to be placed upon the bed, after being used by one of the persons who had been employed to rub in the ointment with camphire. Once, some wine was offered to him, instead of the wine and water; but, when it approached his nose, he suddenly refused it, saying, impetuously, "it is too strong, I cannot drink it." Between nine and ten o'clock, he requested to see his wife and child, when he tenderly pressed the hand of the mother, but anxiously desired her not to put the child near his mouth, manifestly, not from any apprehension of injuring the child, but from a dread of

the air being disturbed about his face. The tincture of opium was directed to be repeated every hour, in doses of half a drachm, combined with a scruple of the oleum succini rectificatum. He took it three times, but it did not appear to have any influence whatever upon the symptoms, and he complained that it was "strong, and made him worse." At midnight, upon observing a person in the room eating roasted apples, he requested to have some, and ate nearly two of them, with seeming gratification. He then said, that his stomach was restored, and, feeling as if he could eat something more, desired to have a beef steak for supper; this was accordingly prepared, and he chewed two or three morsels, but did not swallow them. About one o'clock in the morning of November 28th, the high susceptibility and the dread of currents of air left him, and he desired to have the door and the window set open. He now remarked, that he was much worse; requested to be released from the confinement of the waistcoat; and said, impressively, that he should "soon be gone." His eagerness for water became quite insatiable, and, *although his stomach now began to reject it by vomiting*, he called for it incessantly. On one of the by-standers asking him if he were not afraid that so much water might do him harm, he replied, "no, I feel it running off as I drink it;" proving, that although his urine passed involuntarily, it was not without consciousness. He likewise de-

sired to have cold water applied to his nose; and his impatience for it increased to such a degree, that two persons found full employment in wetting his nostrils, and giving him water into his mouth. Before two o'clock, he expressed a similar eagerness and impatience for air, asked those near the bed to blow upon him, and desired every person to stand away from the door, that he might feel the cold current. He remained perfectly sensible, (as he had been throughout the whole of the disease,) and without any return of convulsions, until nearly three o'clock, when he expired; *his last moments being marked with calmness and composure.* Very soon after death, *a number of dark, red, or livid blotches appeared about the throat and clavicles; and the abdomen became tense, and much enlarged.*

APPEARANCES ON DISSECTION.

ON opening the head, the dura mater adhered so strongly to the cranium, that great force was required to separate them. The whole surface of this membrane appeared in a state of unusual dryness, and was more free than is common from small red points, or exudations of blood. The vessels of the pia mater were not over-charged with blood. The brain was remarkably close and firm in its texture. A peculiar dryness was observed throughout the whole of its substance. The cerebrum appeared

beautifully white, and had not those numerous red points which are usually observed. When cutting the cortical and medullary portions, they both opposed a strong resistance to the knife; they also preserved their form, under considerable pressure from the finger. A small quantity of colourless fluid was contained in the ventricles. On cutting through the integuments and muscles of the thorax, to turn them back, for the purpose of exposing the ribs and sternum, the whole fleshy substance was observed to be in a state of unusual dryness. The viscera of the thorax had a healthy appearance. The lungs were fully distended with air. There was a general dryness upon the surface of the pleura. The pericardium contained about half-an-ounce of fluid. *The posterior part of the tongue, the outer surface of the epiglottis, and the whole of the pharynx, exhibited strong marks of inflammation; some degree of redness was also observable, although not so conspicuous within the larynx, and upon the surface of the trachea and œsophagus.* At the lower part of the œsophagus, about half-an-inch from the cardiac orifice of the stomach, was an eroded spot, nearly the size of a shilling, assuming an appearance *as if the inner coat had been separated, and shrivelled up by scorching.* The stomach and intestines were much distended with flatus. Their exterior coats, also the peritoneum covering of the other parts of the cavity of the abdomen, and likewise the dia-

phragm, were in a state of dryness similar to the pleura. The rugæ of the inner coat of the stomach were numerous, large, and very distinct. A few inches below the cardia was a fullness of the vessels of the villous coat, which caused a spotted and circumscribed redness, about three or four inches in diameter. The liver and spleen were of a light or ash-coloured hue; in other respects, of a healthy appearance. The general dryness which prevailed in the fibres of the muscles, within the substance of the brain, and upon the membranous surfaces, extended likewise to the omentum, which, when pressed in the hand, felt like a loose net of packthread. It is proper to remark, that the stomach, the œsophagus, and the trachea, were not only carefully inspected by Mr. Lloyd, Mr. Booth, and myself, upon the spot, but that they were taken from the body and brought to London, where they were further examined by Mr. Blair and Mr. Dixon, who are much in the habit of inspecting bodies by dissection; and that both these gentlemen, without any communication with each other upon the subject, favoured me with a written statement of the appearances they observed, previous to their receiving any intimation that the parts were taken from a person who had died of Hydrophobia. These parts were also examined several successive days, after being immersed in water. The redness of the pharynx was darker and stronger, and assumed a livid hue, as the membrane became corru-

gated; but the redness of the membranes lining the trachea and œsophagus went off soon after the parts were put in water. There was not the slightest appearance of coagulum, exudation, or adventitious membrane, in any part of the pharynx or larynx; nor throughout the whole extent of the œsophagus or trachea. The body was examined twenty-nine hours after death. The disease continued about thirty-eight hours from the time when the man first became sensible of indisposition. Observing the progress of symptoms as they occurred in this case, the disease might be divided with tolerable accuracy into several distinct periods or stages, viz. 1st, A sensation of cold and numbness about the wound, and throughout the hand and arm, during two or three days.—2dly, A severe pain of the shoulder, with undefined general indisposition, about ten hours.—3dly, Horror of liquids, with violent convulsions and distortions, fourteen or fifteen hours.—4thly, Comparative tranquillity, with a desire for water, and a dread of currents of air, nearly twelve hours.—5thly, An insatiable craving for air and water, between two or three hours.

After declaring it as a direct impossibility that, according to the known laws of the constitution, *a poison of any kind*, and however introduced into the human body, can lie

inert for a period of eleven weeks; I shall endeavour to account for Dr. Pinckard's case, without the intervention of a dog. Recommending that the progress of disease, which is cleverly detailed, should be read with attention to understand the remarks I am about to make, I shall confine myself to the appearances on dissection—those appearances enabling me, I think, to account for every symptom that occurred.

“At the lower part of the œsophagus, (gullet) about half an inch from the cardiac orifice of the stomach, was an eroded spot, nearly the size of a shilling, assuming an appearance *as if the inner coat had been separated, and shrivelled up by scorching.*”—

That this “eroded spot” was the cause and not the effect of complaint, I have little hesitation in declaring; and that a dread of, or an impossibility to swallow water or breathe cold air, were its natural consequences. When inflammation is found in its most virulent colours, affecting organs so

materially concerned in breathing and deglutition as the windpipe and gullet, it cannot, for a moment, excite surprise that cold air should prove a strong cause of excitement in the former, or the act of swallowing (whether fluids or solids, but more particularly fluids) in the latter. The ulcerated surface of the gullet and the inflamed portion of the windpipe were greatly and constantly excited. The natural consequences of such excitement was an almost destitution of the secreted juices, and hence the dreadful sense of suffocation the patient had. He then could neither breathe cold air, in fact, could scarcely breathe at all, nor swallow either fluids or solids; the approach of the former, indeed, excited the utmost dread. At this, no one need wonder; if any possess that feeling, let him look at the case when the stage of excitement ceased—let him examine well the facts, when gangrene supervened; for that gangrene came on in the œsophagus before death, the appearances on dissection fully demonstrated

—let him do this with an impartial eye, and the case ceases to be mysterious.

The common effects of approaching mortification were sufficiently shewn by the patient's own words, "he was better;" and to his own sense, he undoubtedly was:—"his stomach was restored"—he could swallow fluids, he could eat, and bear the action of the cold air; and why could he do this?—Because, irritation no longer existed—because the injured parts had become lifeless. How then was deglutition performed?—it may be properly asked. It was not functionally performed, as Dr. Pinckard has clearly described. — The man gulped down the water, he swallowed it with his head low; it was indeed evidently poured into the stomach without any consent on the part of the deglutitory muscles. The currents of cold air continued to excite for a time after the man could drink, until the trachea entered into the state of general lifelessness. Though the tone of the parts, immediately connected with the shrivelled ulcer, was

completely destroyed, the stomach was evidently labouring under active inflammation, and rejected the inordinate supply of fluid that the man, (probably induced by the sense of burning heat,) would have loaded it with. This is again no wonder; — What then extraordinary remains to be explained?

The gullet was from some cause ulcerated, and the most dreadful excitement was produced by the execution of its ordinary functions. The neighbouring parts, subject from their locality to the like cause of irritation, felt the same inconveniences;—breathing cold air produced the same excitement on the windpipe that the act of swallowing caused in the gullet. Mortification came on in the gullet; the tone of its muscles were of course destroyed, and water could be readily poured into the stomach—the patient feeling every wish for its cooling effects, from the inflammation having extended to the latter organ.

The stomach is presumed to have felt that inflammatory action before death, by

refusing its office, as well as by post-mortem evidence. Why should we then, in this case, run back a period of three months for an explanation? Why look to the bite of a dog, a dog that we have no proof was rabid, for the cause? Surely, an easier and fairer demonstration can be found. Ulceration was produced in the gullet. How? no one can tell, perhaps; but this we do know, that if it occurred from the communication of *rabies*, it was the first symptom of that complaint; as the inflammation of the gullet and windpipe were the consequences of it. Visible complaint did not last long enough to produce, as its effects, the ulcer in the gullet. Inflammation could not in the time have caused such a lesion of substance, but was itself brought on by that lesion, however produced. The first effect, therefore, of *rabies*, if *rabies* were connected with this case, must have been an ulceration of the man's gullet! The explanation I shall give, will not be far-fetched, or have any thing beyond apparent proximity to homely truth to recommend it.

The man, perhaps, had eaten a portion of hasty-pudding, swallowed too hot, or a piece of some other kind of pudding too hot, swallowed hastily. However produced, inflammation ended in mortification, and that was, apparently, the direct cause of death. The pulse, during the latter stage of complaint, and the *manner* in which the man died, as well as the appearances after death, all seem to give extreme probability to this near cause of dissolution. Nothing, it appears, could persuade the man that his illness proceeded from the bite of the dog ; though, to do the medical men and the by-standers justice, they each used their utmost endeavours to make him believe so. Dr. Pinckard has related the case in a very clear, able manner—so clear, indeed, that I think the medical reader will readily come to a proper conclusion on its claim, as proceeding from the bite of a dog, and say as I do, and as the sufferer himself did, it could have no connexion with such an event. As regards the *sense of cold or numbness* about the wound on the finger, which, *on being questioned*

particularly, the man recollected, but little need be said. How often does it happen, in bruises or cuts, that for a time after they have healed, we see them highly sensible of atmospheric changes. There was little or none in this case, it seems, for the appearance of the recently-healed wound was unaltered. To assume this, then, as an index to point from effect to cause, is sheer nonsense. I know not that Dr. Pinckard be living—I trust, however, that if he be still saved to the profession, he will not hesitate to inform us of the reasons that led him to his opinion, of the disease being caused by the bite—that is, the connexion he can establish between the presumed cause, and the effects described. I am sure, I shall read his opinions with much pleasure, for a man capable of noting minutely, symptoms, progress, and termination, as he has done, will, by the publication of his reasons for belief, go far to make myself, perhaps, a convert to *Hydrophobia*.

There was not, as the case was published,

(I have given the whole pamphlet) one single comment attached to it, to attempt to elucidate, why a man being bitten by a strange dog, (we have no proof of it being a mad dog) should, three months afterwards, die from the effects of inflammation of the stomach, and ulceration and mortification of the gullet. I am, however, willing to imagine such a thing, if Dr. Pinckard will only condescend to tell me how I shall set about it.

Dr. Barsdley, of Manchester, relates the case of

“JOHN LINDSEY, a weaver, of Fearn Gore, near Bury, in the county of Lancaster, aged 36, of middling stature, and spare habit of body, of a temperament inclined to the melancholic; who was brought into the Manchester Lunatic Hospital, on Friday, May 16th, 1794. He was immediately visited by Dr. Le Sassier, who obligingly communicated to me the following particulars. The patient expressed feelingly his sense of danger, *from the persuasion, that his disorder proceeded from the bite of a mad dog*; he was desired to drink a little cold water, which, upon being presented to him, he rejected *with every appearance of disgust and horror*. Being again strongly urged to drink, he made the attempt, and

with great exertion got down a small quantity. *He was perfectly rational, and appeared apprehensive of danger from the least noise or approach of any person towards him* : after being removed from the examining-room into the hospital, he ate some bread and cheese, but with much difficulty, and *requested to be permitted to drink some butter-milk* ; he attempted to swallow this liquid, and in part succeeded, but not without the most violent struggling efforts, attended with distortions of his countenance, and which remained slightly convulsed for some time afterwards. A consultation on this case was called, of the physicians of the hospital, by Dr. Le Sassier, and the presence of Dr. Perceval, (physician-extraordinary to the charity) was requested ; the latter gentleman concurring strongly in opinion with Dr. Le Sassier, (the rest of the faculty being absent) that *there was not the smallest doubt but that this patient was affected with genuine Hydrophobia*. The following particulars of this man have been collected. He was industrious, sober, and regular in his living, but subject to low spirits, from the difficulty he found, at times, of maintaining a wife and six young children : his exertions, however, were generally proportionate to his difficulties. But, of late, from the depreciation of labour, he found that the most rigid economy, and indefatigable industry, were not sufficient to ward off from himself and family, the calamities of hunger, debt, and most abject poverty ; the

anxiety of his mind now became almost insupportable. As the last refuge for his distress, he applied a few days previously to the attack of his complaint, to the overseers of his parish, for their assistance to pay his rent, and thereby prevent the seizure of his goods; but obtained no relief. Overwhelmed with grief and disappointment, he yielded to despair, resigning himself and family to this wretched state. He was soon roused from this state of fancied apathy, by the piercing cries of his children, demanding bread. In a paroxysm of rage and tenderness, he sat down to his loom on the Monday morning, and worked night and day, seldom quitting his seat till early on the ensuing Wednesday morning. *During this period of bodily fatigue and mental anxiety, he was entirely supported by hasty draughts of cold butter-milk sparingly taken, nor did he quit the loom until his strength was completely exhausted.* He then threw himself upon his bed, and slept a few hours; on waking, he complained of giddiness, confusion in the head, and a general sense of weariness over his body. He walked five miles that morning, in order to receive his wages for the completion of his work, and, on his return, felt much fatigued, and troubled with a pain in his head. During the night, his sleep was interrupted by deep and involuntary sighs, slight twitchings in the arms, and a sense of weight and constriction at the breast; *he also complained of much uneasiness at the light*

of a candle, that was burning in the room. On evacuating his urine, he was obliged to turn aside his head from the vessel, as he could not bear the sight of the fluid without great uneasiness. Being rather thirsty, he wished for balm-tea, but was unable to swallow it from pain and tightness, which he experienced about the throat. When the liquid was presented to him, he suddenly exclaimed, *good God! 'tis all over with me!* and which exclamation immediately recalled to his wife's recollection the circumstance of his having been bitten about twelve years ago by a large dog, *apparently mad*, which was flying from the pursuit of a number of people on the high-road between Warrington and Manchester. His irritability increased, till death put a period to his sufferings."

Dr. Bardsley continues:—

"The body was opened in the presence of one of the physicians, myself, and two of the surgeons belonging to the charity. I have to regret that *the examination did not extend to the brain*; and, indeed, that a more minute investigation of the morbid appearances accompanying this fatal malady did not take place. But, such was the *peculiar horror* inspired by a view of the progress and catastrophe of the disease, that the *accustomary dread of danger* arising from any examination of an hydrophobic subject, was increased, by this instance,

to a tenfold degree. Besides, the *well-known prejudices* entertained by the country people, against the opening of dead bodies, rendered us anxious to finish the inspection before the arrival of the patient's friends, who were hourly expected.* In the cavity of the thorax no unusual appearances were discovered; except, that the surface of the lungs appeared of a darker hue, and more distended with blood than usual. No inflammation appeared on an inspection of the fauces; nor were the muscles of the larynx or pharynx in the least discoloured. The stomach and œsophagus were removed from the body, and subjected to particular inspection. A longitudinal incision was made through the whole cavity of the œsophagus, but not the least marks of disease were discovered. *Upon opening the stomach, evident traces of inflammation were observed.* It commenced at the superior orifice, and was there confined to small and irregular spots of a dark red colour; and might also be traced in a linear form, and of a brighter red, along the curvature of the

* What a specimen does this account furnish of the "march of mind" among the Manchester medical men; what a striking similitude it exemplifies, between the feelings of *boors*, and the fears of *philosophers*.—The "peculiar horror" of the one party, and the "well-known prejudices" of the other, are too closely allied to be mistaken—they are the children of one common parent, and that parent is the mother of superstition.

stomach, terminating at the pylorus in large and irregular spots of a gangrenous appearance. The contents of the stomach did not exceed three ounces; and consisted, chiefly, of the medicines that had been swallowed, mixed with a dark-coloured fluid. All the other viscera of the abdomen exhibited no marks of disease."

This being called a case of "*genuine Hydrophobia*," I will fairly examine the claims it has to such a title.

A half-starved, heart-broken weaver, who had worked himself off his legs, to keep the wolf from his door, and who had seen his wife and children want bread, became mad with anxiety. Dr. Bardsley has left us indeed to guess whether the man was mad or not, but I think I do not unfairly deduce that such was the case, by his being brought as a patient to a lunatic asylum.

On being asked his malady, he tells the medical men that he is suffering under the effects of disease from the bite of a dog. This the man says himself, "*and expresses feelingly his sense of the danger he expects to arise from it.*"

Thus, we have a madman's evidence that, about twelve years before, a strange dog bit him, and his belief that he is dying from the effects of that bite. This tale, which is thought not like others told by madmen, "signifying nothing," seems implicitly to have been believed by the Manchester medical men. They, in strict consonance with this opinion, offer the man water, which of course he rejects, "with every mark of disgust and horror." They again press him to drink more urgently, and he swallows a little. "*He was perfectly rational, and appeared apprehensive of danger from the least noise, or approach of any person towards him.*" This sentence I cannot understand. What can Dr. Bardsley have meant? The man was *rational*, and afraid of every body and every thing? If I meet a strange man in the street, and he manifest terror at my approach, as he would at the step of an assassin; if I see him pursue the same conduct towards the next person he may meet—what shall I think of him? Shall I think him in his senses?

If then the conduct of Dr. Bardsley's patient be what he thinks "*perfectly rational*," how will that gentleman define insanity? I certainly think the man was mad, and moreover believe, that nobody would have held a different opinion, if he had not mentioned the dog story. Well! though the man dislikes water, he asks for butter-milk, without any *disgust and horror*, of course. His terror too does not extend to bread and cheese, for he eats some as soon as he has got rid of the doctors. He drinks the butter-milk with great difficulty. Having asked for butter-milk, does not betray *disgust and horror*, nor does a difficulty in swallowing it constitute *Hydrophobia*.

I shall leave poor *Lindsey* to his butter-milk for a little time, and make a call on the medical men who are consulting on his case, and have come to the conclusion, "*that there was not the smallest doubt but that this patient was affected with genuine Hydrophobia.*"

So little did I, when I first read this sentence, feel inclined to deny the communica-

bility of Hydrophobia, that I might have been ready to have admitted, were the question then asked me, that it is infectious—at once and instantaneously infectious. The doctors had it,—that the disease was *genuine Hydrophobia*. The man certainly did not like water, but he asked for butter-milk and drank some, though with great difficulty, but unaccompanied, at least I imagine so, by his asking for it, with *horror and disgust*.

After betraying symptoms of the utmost mental excitement, such as begging those about him to protect him from harm at the least noise, &c.—the man dies, and dies, I have not the slightest doubt, of brain-fever. The circumstance of his not being able to bear the light of a candle at the commencement of the complaint, remotely leads me to this conclusion. There was, however, inflammation of the stomach most decidedly present. The case, as a case of Hydrophobia from the bite of a dog, or indeed any other cause, is unworthy even the plainest comment. It was decidedly a case of gas-

tritis, (and most likely brain-fever,) accompanied with diseased impressions on the man's mind relative to the bite of a dog—a case, where the mental powers from very obvious causes, as the poor fellow's history shews, were completely subverted and annihilated. Inordinate depletion alone may produce brain-fever. We shall have instances of this in the accounts of persons who have been shipwrecked on desert shores, &c.—where, in almost every case of death from absolute want of sustenance, or a want of proper sustenance, the sufferers have died raving mad. Strong excitement producing brain-fever, being probably the ready mean through which death approaches, where it does not take place from the effects of starvation in their gradual and broadest sense.*

* It will be seen confirmed, by the fate of many persons thus situated, who have, from want of other sustenance, been obliged to eat human flesh. The mind, shrinking from the claims to the unnatural banquet that the fainting body makes, is often “frightened out of her propriety;” and, from this excessive excitement, death may supervene.

Particulars of a Case of Madness in a Bitch, by which a Woman, four Children, and the Author, were bitten.

ON Sunday, May 22d, 1825, four children were brought to me for advice, reported to have been bitten two days before by a dog supposed to be mad. Three of the children were girls, from the age of seven to eleven, and one a boy, aged fourteen years.* The three girls had been all slightly bitten in the nose, and one of them, named Patching, had received on that day an additional snap on the ear. The lad was bitten on the cheek, which bore evident marks of two teeth. Before I applied any remedies, I sent to my friend Mr. Sutton, and that gentleman immediately attending, proposed a free application of the oil of turpentine to the wounds, which, after being first freely scarified, were thus treated. The situation of all the wounds, it will be seen, presented considerable objections to excision, had I been disposed to have resorted to such a mode. The application of the spirits of turpentine, excited some degree of redness in the wounds. But the children, one and all, appeared to have no fear, but of the pain the preventive means adopted gave them.

* This poor lad has since met his death, by falling down a well, as he was drawing water.

I saw the children for a few days after, when the wounds had healed. One of them, however, was subsequently taken by its parents to a physician in the town, then attending the dispensary, and I believe other local remedies were applied to the wounds, and the child took medicine internally.*

Having been informed where I could obtain a sight of the dog, and that I might take her away if I thought proper; as soon as the children left me on Sunday, I went to the house of the woman whom she belonged to. This was a poor Irishwoman of the name of Boots, residing in Chesterfield-court. In company with Penfold the police-officer, (whom I took with me to destroy the animal if I were not permitted to confine her,) I first saw the creature. It was a pied bitch, of the larger turnspit kind, about ten months old. The woman informed me that the usual habits of the animal were of the most docile description, and that she had suffered, until a few days before, the children she had bitten to play with her without injury, and lay at night in her own bed-room couched on her clothes. A kind of unusual snappishness had for a day or two been observed by

* What these means were I know not, but I do not hesitate to assert, as my belief, that whatever they were, the child would have been equally safe had they never been used. I have a right to such an assumption, by the result of my own case as well as the others.

those about, and the neighbours reported that the animal had been seen to worry and tear a hen. The woman went out to daily work, and told me that she usually confined the dog in a dark coal-hole in the room, and that she had frequently gone for the whole day without food or water. She had drank freely of water a short time before I saw her. There were no appearances unusual about poor *Fan* that I could observe, when she made her entrée to the room from her coal-hole dormitory. She seemed lively and playful; so much so, indeed, as to induce me, without the slightest hesitation, to permit her to put her fore feet on my knee, and snap in seeming puppy friendliness at my hands. This she did many times, but while so engaged, made several attempts to spring at my face and bite me there.

Knowing, by the cases of the children, her predilection for the nasal organ, I secured myself from injury there by holding tightly the rope round her neck, but offered her my fingers to bite if she felt so disposed. She observed the same conduct towards the woman her owner, snapping at her, but without apparent anger. Penfold seemed rather alarmed at these appearances, and advised me "not to be too free with her." I could not enter into his fears, and therefore still suffered the dog to continue on my lap. As I held her, I remarked that she snapped at flies, as they flew by her, and at the bright lines reflected by the sun's rays on the articles of furniture

in the room. There seemed a trifling increase of the flow of saliva in her mouth, which I attributed to the exertions she occasionally made to free herself from the grasp I kept, somewhat tightly, perhaps, by the rope round her neck. I tied her legs, and she was carried in a sack to an uninhabited house, where it was proposed to confine her. Taking every precaution to prevent her escape, I left her untied in a room in about the same condition I had found her. I did not give her either victuals or water, as she had been fed just before I saw her. She had, I was told, eaten very sparingly of food, though she had drunk freely of water.

On Monday, May 23d, about three o'clock p. m. I went, in company with Dr. Martin and Mr. Sutton, to see the dog. Her playfulness had given way to a peevish humour—the effects, I thought, of her strange lodging. She ate heartily of some raw sheep's liver, but did not drink much of the water, though she had been without it for 26 or 27 hours. She smelled to the two dishes, (one of which contained the water, and the other a mixture of oatmeal and water,) and pushed them about with her nose in an odd manner.* The liver thrown to her, she carried

* Mr. Blaine, in his "Canine Pathology," says, dogs that are mad, are fond of licking and thrusting their noses against any thing cold.

piece by piece into a corner of the room and ate. We had some strong wooden battens nailed across the doorway, and fastening the door with a string, we bade *Fan* adieu for the night.

Tuesday, May 24th.—This morning, about six o'clock, I was raised by a rapping at my door, and a "please, sir, your mad-dog has got loose," from Wiggins, the father of one of the children who had been bitten. I was soon on the alert, and found poor *Fan* abroad truly enough, to the immense terror of the lieges, an assembly of whom had met for the purpose of stoning her to death if quiet, running away from her if she attempted to bite, or running after her if she attempted to run away. In fact, the mad-dog *tocsin* was sounding in all its horrors. Since her escape, which happened about two o'clock that morning,* she had been seen by some people at Hove Brick-yards, about a mile and half from her place of confinement, to bite one or two dogs. She had, however, found her way home, and was, when I saw her, at the step of her owner's door. While I was preparing for the caption of my prisoner, another "mad-dog" ran down Edward-street close by us, with a gentleman on horseback

* She tore her way through the battens, forced open the door by pushing against it and breaking the string, and finally made her exit, by jumping through a window into the street.

at his heels. This gentleman declared that he had seen that dog bite four others. (The dog, I learned, was soon after stopped and struck down with a sabre).

In securing *Fan*, which I did myself, as much from necessity as choice, (since about 60 persons present were kind enough to allow me that honour, without the slightest attempt to share it with me) she first bit me in two places slightly on the fingers, and then once rather severely through my coat and shirt in the right arm.* I, however, gained my point, and having carried her to my own house in my arms, I chained her in an under-ground kitchen. Determined to give the experiment every degree of fairness in my power, I engaged with the woman who owned the

* In this case not even the simplest remedy was in any way resorted to; and the wounds were permitted to remain unwashed for some hours after their infliction. In connexion with the foregoing, I may be perhaps permitted to say a few words more. The opinions I have always held of Hydrophobia, were known to many medical friends, long before the circumstance occurred, which induced me to give them a public character. When bitten by the dog, I can truly aver that I never felt a fear. Since then I have had an attack of severe illness, and my spirits suffered with my health; I, however, could never catch myself disposed to trace a connexion with preceding circumstances, or cherish for a moment the slightest doubt of the result of my little experiment.

dog to come and feed her, which she did twice that day. On Wednesday, 25th, there was a decided alteration in the dog's manner. She had broken successively two chains with which we had fastened her the day before, and destroying a third, was now loose in the kitchen, tearing every thing to pieces that she could get hold of, and gnawing the wood-work of the door. She was at times tranquil for an hour or two, and then with fresh vigour recommenced her work of destruction. I went to take a cautious examining peep at her about one o'clock with the woman, but no sooner had we opened the door for that purpose than she flew at us, "open-mouthed."

In the afternoon, when her mistress put in some victuals and water, *Fan* was pretty quiet, and coming to the door, after playing with her, bit her in the cheek. The woman was now alarmed, and declared that she would feed her no more. As she had, however, much fondness for the dog, she came the next morning, Thursday 26th, and opening the door to put in the victuals (before I came down-stairs) the animals tore her again severely in several places on the hands and arm. She had had presence of mind to close the door by the time I came down, for, hearing her shriek and call for assistance, I had run to her half-dressed. I endeavoured to calm the woman's fears but without effect, till, as I would not apply caustic to the wounds, or "cut them out," she went

to Mr. Coleman, who was kind enough, as she told me, to do both the one and the other for her. That gentleman, however, somehow left untouched the wound on her face, which probably was the woman's fault, who, being neither old nor ill-looking, might not like to have the caustic "prey upon her damask cheek." Be that as it may, this wound and one or two other slight touches on the fingers, escaped Mr. Coleman's eyes, and, consequently, Mr. Coleman's knife and caustic. Here was a complete truce with kindness towards *Fan*, and in the evening, hearing that she was quite still, I put in a basin of food, and one of water. The next morning, 27th, we had another alteration in the dog's manners, but that alteration was on the score of good behaviour, as she had become perfectly quiet. Dr. Martin, who had most assiduously attended to the case, and had called daily to see the dog, felt now, as well as myself, quite satisfied that the animal was dying; in fact, her appearance might have been most truly delineated, 'as a dead dog standing upright.' She took no notice of passing events, her eyes were glassy and deathlike, and she seemed much affected about the organs of breathing, catching her breath hard and short—the jaw, too, seemed fixed. Again putting in a basin of food and water, I left her for the night, about 11 o'clock p. m., and found her dead the next morning at breakfast-time.

When I entered the kitchen, I saw three basins

containing food, and the same number holding water. Two of the first she had eaten from sparingly, but all of the latter seemed untouched—she had, therefore, it was evident, from Wednesday evening drunk no water, and taken only a small portion of food.

The floor of the kitchen was strewn with fragments of a rug, an old cloak of the woman, and some of the servant's clothes which had been left there.* She had even gnawn to shreds some bits of cord pendant from the seat of a child's swing, which was suspended in the place; the walls, the door, and, indeed, every thing that she could get at, without any apparent distinction. She was lying dead near the door, and I remarked that her tail was strangely curved, being crooked off immediately from the rump, and hanging away as it were from her hind-legs. The tongue was rather out of the mouth, which was half-open. There were several wounds about the legs, where, in her paroxysms, she had bitten herself.

On Saturday, 28th, Mr. Sutton and myself opened the body of this dog, in the presence of Drs. King and Martin. The following appearances were noted

* What a strange deviation did this malady make in the dog's general habits. The very cloak that she had been accustomed to lie on for months—spread by the same hands that had during that time prepared it for her as a bed—was scarcely thrown on the floor, before it was torn to pieces.

on dissection. The *liver* was of a good size, and apparently healthy. The *heart* rather large; and, like the neighbouring vessels, gorged with blood. The *stomach* was nearly empty, and bore the strongest marks of inflammatory action on its inner coat and general substance. The *intestines* through all their convolutions were much thickened, and marked by the same unequivocal appearance of active inflammation. There were about twenty live worms in the *ileum*—the longest of the small intestines. The *lungs*, on being inflated, were (with the exception of traces of inflammation) seen without disease; but the *stomach* being submitted to distention, the air was found not to pass from the thickened state of its *pyloric* (lower) orifice into the *intestines*.

It is worthy of remark, that this fact (from observations made on a case of recent dissection of a dog dying supposed *rabid*) was thought by Dr. Martin as likely to occur, and mentioned as such by that gentleman, before the experiment was made that confirmed its presence. Traces of inflammation were discernible about the *windpipe* and *gullet*—more particularly the latter.

The *tongue* seemed rather swollen at the root; and the *sub-lingual glands* were unusually prominent.* The latter remark may be quoted on

* It has struck me that these glands, when inflamed, as I have described, have been mistaken for the *vesications* the

the appearance of the *sub-maxillary* and *parotid* glands. The brain presented nothing extraordinary, there being a trifling collection of fluid in its ventricles, and a scarcely discernible blush of inflammation on its *dura mater*. The *kidneys* and *bladder* were healthy, as was the *uterus*. There was, if any, only a trifling increase of the natural flow of *saliva* about the mouth, and it was peculiarly viscid.

A clearer case of *rabies canina* than the above, I certainly never heard nor read of, and this opinion is universal among those persons who saw the dog. The state of stupor and listlessness so soon succeeding furor, as I before remarked, strikingly exemplified the state "as a dead dog standing upright." Strong excitement, from some cause, was evidently developed by the dissection of this dog. That that excitement induced a disinclination to taste, and perhaps an inability to swallow water, with the other strange symptoms, I can readily imagine;

Russian surgeons say they have seen beneath the tongues of rabid animals; in fact, that they *are* the vesications they have described. Their appearance at first sight in this case was equivocal, but a little attention soon explained it.

but that a bite from a dog dying under those or any other circumstances, can infuse a specific poison into the human system—let it be called by any name—I deny.

By refusing all precautionary measures, I have, in the minds of my medical friends, staked my life on my opinions. I have every confidence, short of bigotry, in their correctness;—and, with (what others have been pleased to term) “the most dreadful of all human calamities” presumed to be hanging over me, feel competent to declare, that imagination will at least have no share in the result. I shall die, “and the worms may eat me,” but not—as a disease to be communicated by a dog—of Hydrophobia.

APPENDIX.

SINCE the foregoing pages were written, it has been asked, *what benefit would curative practice derive from the publication or adoption of such opinions?*

To this, I would first answer, that I think any man justified, in publishing what he believes to be correct, without any other object than the love of truth; before I endeavour to point out the advantages which society *must* derive, from the reception of opinions like those I have advanced, should those opinions be seen to possess truth for their basis.

In the first place, the idea of contagion, from an injury by a rabid animal, would be done away. Believing, or rather proving, (for I would have the point clearly established by experiment,) that no *poison*, under such circumstances, really exists, we shall have our heads clear from any bewildering hypotheses, regarding the mode by which the disease is first produced.

Secondly, we shall be able to assure the patient, with the utmost sincerity, that he is in no more

danger from the bite of a mad animal, than the bite of an animal not mad, and received under ordinary circumstances. We shall therefore set the mind free, as regards the result, and be able to attend to the health and habits of the patient, as we would, if he were laboring under the effects of any other accidental misfortune.

Again, we shall discard all ideas of *specific remedies*, where we are convinced that no *specific disease* has been entailed; and look to ordinary means to combat ordinary results.

In all the cases of reputed Hydrophobia, the medical man is seen to have given himself little or no trouble, to become acquainted with the previous health or habits of his patient; and, if he were ever to take that trouble, he would (with the idea of a specific disease before his eyes) be nothing the better for it, as regards his curative treatment.

If we carefully review what was, and still is, the medical practice in cases of presumed Hydrophobia, we shall find that a difference of opinion on the subject is justified; and, that different remedies may at any time be proposed, without calling up a blush on the cheek of their projector.

That we have never cured a case of such disease, when it is said to have been fully developed, is allowed; of a proper mode of treatment, therefore, we are ignorant; as entirely ignorant as we were ten centuries back.

We have given Mercury, without benefit, in Hydrophobia, so called, and we give it still. We have given antispasmodics and opium long enough to know their entire fallacy, and we still give them, in the face of that knowledge.

We have bled and blistered, with a very little prospect of relief, and we bleed and blister still.

That there has ever been a decided want of congruity between our notions of the powers of the human machine, and the effects of the supposed Hydrophobic *virus*, is evident, from the many theories which have been formed to support its existence, and explain its attributes; yet, strange to say, these theories are just as opposite to each other, in what should be their radical similarities, as the remedies cried up, from time to time, as infallible preventives, or certain cures of this complaint. Our theories and notions of practice have ever differed widely from each other, yet each has found advocates to insist on its correctness. That they cannot be all right, is very clear. That no one has been *proved* correct, is also certain.

One very clever practitioner will tell you to rub in mercury, and get the constitution under its influence, with the hope of curing that succession of spasms, which forms the strongest feature of an Hydrophobic case. Ask him why! and he cannot give you a fair reason; for, he knows that no case ever succeeded under *that* mode of treatment.

Another, equally eminent, will advise you to use antispasmodics and opium; but he will find it not easy to justify their use, either by theory or practice.

A third will recommend you to view the case in the light of an inflammatory disease, and to bleed largely. If you require his reasons, he will tell you that the case seems to demand such a plan of treatment, from its very nature; but, he must also assure you, that such practice has never cured, though it is said to have ameliorated the complaint.

With this mass of stubborn fact before him, the young practitioner will see that he may stroke the scarce-fledged chin of science with the same complacency, for a theory to support, or a remedy to cure Hydrophobia, as the sage smooths his redundance of beard, the growth of years and practice. Hydrophobia appears a neutral ground, on which the Tyro and the Mentor have equal claims—a kind of no-man's-land, where inexperience and wisdom quietly walk, hand-in-hand, together. Such will it probably remain, while our present ideas of it continue.

But, let us view this complaint entirely unconnected with a *virus*, or rabid animals. Let us see, only, a disease composed of certain peculiar symptoms. Let us remark, violent spasms, partial or general, however produced, (and they are proved to have been produced in several different modes) threatening suffocation, a dread of water perhaps, or,

an inability to breathe the cold air, and ending in hasty dissolution.

Let us, then, examine the body of the unfortunate subject of this complaint. If we find inflammation of vitally important organs, (and this has been found more or less, in presumed Hydrophobic subjects) ought not our curative practice to be built with a view to counteract these visible effects, rather than to destroy a shadowy cause?

It can be imagined, (according to our ideas of the action of known specific poisons) that, if a cause be not destroyed, until certain effects be produced, those effects will then go on, independant of the primary cause, and, the destruction of such cause, if it could be effected, would but ill-serve our purpose. Why then should mercury, or any other remedy, with a clear specific view to the destruction of cause, be given in a case of Hydrophobia, when the effects of the supposed poison are developed?

It is of little consequence, if a poison has been introduced, that we take it from the system, in time to save the patient from any decided mischief it could perform, if that patient afterwards die of collateral effects, induced by the temporary admission of the cause.

Much may be said (but here, perhaps, irrelevantly) of which we commonly call specific remedies. It will answer my purpose to instance the effects of mercury in the cure of the venereal disease. That

medicine has an undoubted property, in a large majority of such cases, above all others, to cure complaint. But, if the effects of the venereal poison on the system were of the quick, and life-destroying nature, as those of the Hydrophobic virus are said to be, of what avail would be this sovereign remedy? Before that remedy could be introduced into the system to destroy *cause*, the *effects* will, probably, have killed the patient.

If I hold in my hand a clear and undoubted remedy for the effects of a certain poison; — If I know that my patient is labouring under the effects of that poison, and I find him with inflammation of the lungs, gullet, stomach, or brain, (as dissection has proved in an Hydrophobic case,) shall I depend upon my specific for the cure? Should not my first duty be directed to conquer certain evident reasons for the probable destruction of life, without giving myself a thought whether they are *causes* or *effects*? Should this be my practice, or must I hunt for specifics, supposed capable of curing inflammation of the trachea, lungs, stomach, gullet, or brain?

Experience teaches us, that we must do something; *at once*, or not at all, in what are called Hydrophobic cases; since such cases are seen to last but a day or two, at most.

That this disease, however produced, is of an inflammatory character, there is, I think, hardly a doubt. When we notice its abrupt commencement,

violent progress, and hasty conclusion, I think this opinion is amply borne out; without an appeal to *post mortem* evidence, which confirms it. We may also be led fairly to believe, at the commencement, that the complaint is principally local. We first see the muscles of deglutition affected, (exemplified by their spasmodic action when called upon to perform their office,) and until the muscles of respiration are, probably from their locality, subjected to complaint, we may have regular paroxysms of spasm. As soon, however, as the latter muscles are excited to inordinate, and unintermitting action, the "hysterical breathing," ably remarked by Dr. Pinckard in his case, may come on; and we shall, it is likely, have the same dread and difficulty of breathing, as we had before of swallowing fluids. We shall then call out with as much eagerness, "the door, the door!" as we before exclaimed, "Oh! God, water!"

There does, indeed, seem every-thing conclusive, to point out the gullet or stomach as the seat of primary affection in Hydrophobia; and, from many proofs, there is not a doubt; in active inflammation of those parts, that the dread of water symptom may occur, as its consequence.

To the gullet and stomach, then, would I venture to propose, with a curative intention, that we should call the mind. I would have inflammation presumed in those parts, when the dread of water

symptom appears ; and, (as I know of no benefit our practice would derive from it, if we could define the mode by which that inflammation may have been produced,) so would I have no time lost in a profitless enquiry respecting its presumed origin.

To ask a patient, under such circumstances, if he were ever bitten by a mad dog, is in my opinion tolling the knell to hope gone for ever. If you had an undertaker at your elbow, ready to perform his office before you had begun *yours*, the anticipated result would not, in the fears of the patient, be more strikingly shewn than by such a question, a hint, or even a look, towards such a cause.

If we only obtained an answer to a silly and useless question, I would not complain,—(and it is useless, for, admitting that we satisfy ourselves that a person is labouring under injury from a dog, we do not better our means to relieve him ;) but does it rest here? When such a question has been asked, is our after-treatment likely to have fair play? Judging, from the strong sympathy existing between the stomach and the brain, we can imagine, (indeed we see it every day,) that the latter organ may be readily affected by any irregularity in the former. The brain, therefore, in such cases, may be looked upon as peculiarly disposed to receive injury, and if we excite it by any violent attack on its energies, may not the consequences be dreadful. Let us refer to Mr. Battcock's case. The unfortunate subject of it was, for

a long time, perfectly sensible; his brain, therefore, was not then affected. But mark the sequel; he dies in delirium, and the subject of his mental aberrations is a *dog*—he wishes “*he could get at him, to bite.*” A dog, that, in his state of sanity, he would have declared had never bitten him, and, therefore, could have no connexion with his sufferings! Can we have any thing more strongly illustrative of the mischief that may arise, from a series of such questions, proposed under such circumstances? I will, with the same view, turn back to the case which Dr. Pinckard relates.

That patient would not be persuaded his disease arose from a dog, though he knew that he had been bitten by such an animal, and one, which he might have fairly presumed was mad, or affected in some extraordinary manner. This man had no disease of the brain. The inflammation of the upper part of the windpipe, subjected him to almost suffocation for a while, and the disease in the stomach ultimately destroyed him. Had his mind yielded to impressions which might have been excited by the opinions of those around, he would probably, like Mr. Battcock’s patient, have been raving mad, and died from the effects of brain-fever, as that gentleman’s patient unquestionably did.

Since, therefore, no prospect in a curative sense is held out, by our clearly knowing that a patient labours under disease induced by the bite of a dog,

and we can every way imagine that we may do mischief by the expression of such a belief, charity alone should incite us to suppress it.

Of a disease, then, for which the wisest in the profession can hit on no proper mode of treatment, nor the most ignorant be censured for treating in any way, to receive my opinions can be no injury, and may produce much good.

If I should ever be attacked with Hydrophobia, (which, though I may be thought by some to stand in dread of for twelve years to pass, I do not anticipate for a moment) from being bitten by a dog that certainly was not in her right senses, I would be treated according to the laid-down practice of the profession, in any disease demonstrated to partake of an active inflammatory character. I would be bled (rather with regard to the effects produced, than the quantity of blood taken) as well generally, as from the parts peculiarly affected, and which are shewn in the commencement of the complaint to be the gullet and stomach. I would evacuate the contents of the latter organ by a strong mustard emetic, or one composed of the sulphates of zinc or copper, keeping up their action or not, according to circumstances.*

* By the use of these remedies, I have, perhaps, a view to their counter-irritative properties, as well as consistency in following a common practice in the commencement of most inflammatory complaints.

That fluids may be poured into the stomach, though a dread of, or an inability to swallow them, exists as in an Hydrophobic case, and even in the teeth of spasm, (with the aid of a few stout assistants and a hollow bougie) will be perhaps by few thought impracticable. But anticipating such an objection, I will allow it, and say that the stomach might be brought into action by a solution of tartarised antimony injected into a vein. I would then have a blister laid over the neighbourhood of the stomach, and one on each side of the neck, as near the gullet as may be. The action of the heart and arteries reduced by bleeding, should, in pursuance of the same plan of treatment, be kept under by the use of the fox-glove. With the direct intention of alleviating spasm, I would have administered a tobacco enema, or one composed of a strong dose of opium. After a steady perseverance of remedies with this tendency, if a fatal result took place, who would feel that every thing which could be done had not been done for me, or be prepared to blame a mode of treatment, justified by the apparent conditions of the case?

Having fairly laid my opinions before the public, I conclude my subject with the hope, that I shall be treated liberally. It must be remembered, that, by those opinions, I have not endeavoured to subvert a belief, to which no rational objection ought to be raised, to compass a result

from which no great advantages could spring; but to express the strongest doubts, where doubts seem justifiable, to remove such doubts for sober realities, or barter them for the greatest of benefits.

I necessarily rest myself immediately in the hands of the Public, as, from the very nature of my subject, observations on it become peculiarly public property; but, not forgetful of a due respect for my profession, I claim also an impartial hearing before a tribunal of its members. Let it be borne in mind, that *fiat justitia* should be the motto of a public writer, for he who neglects the precept, paints the goddess with the mist of prejudice before her eyes, rather than the veil of impartiality.

FINIS.

FINIS.





